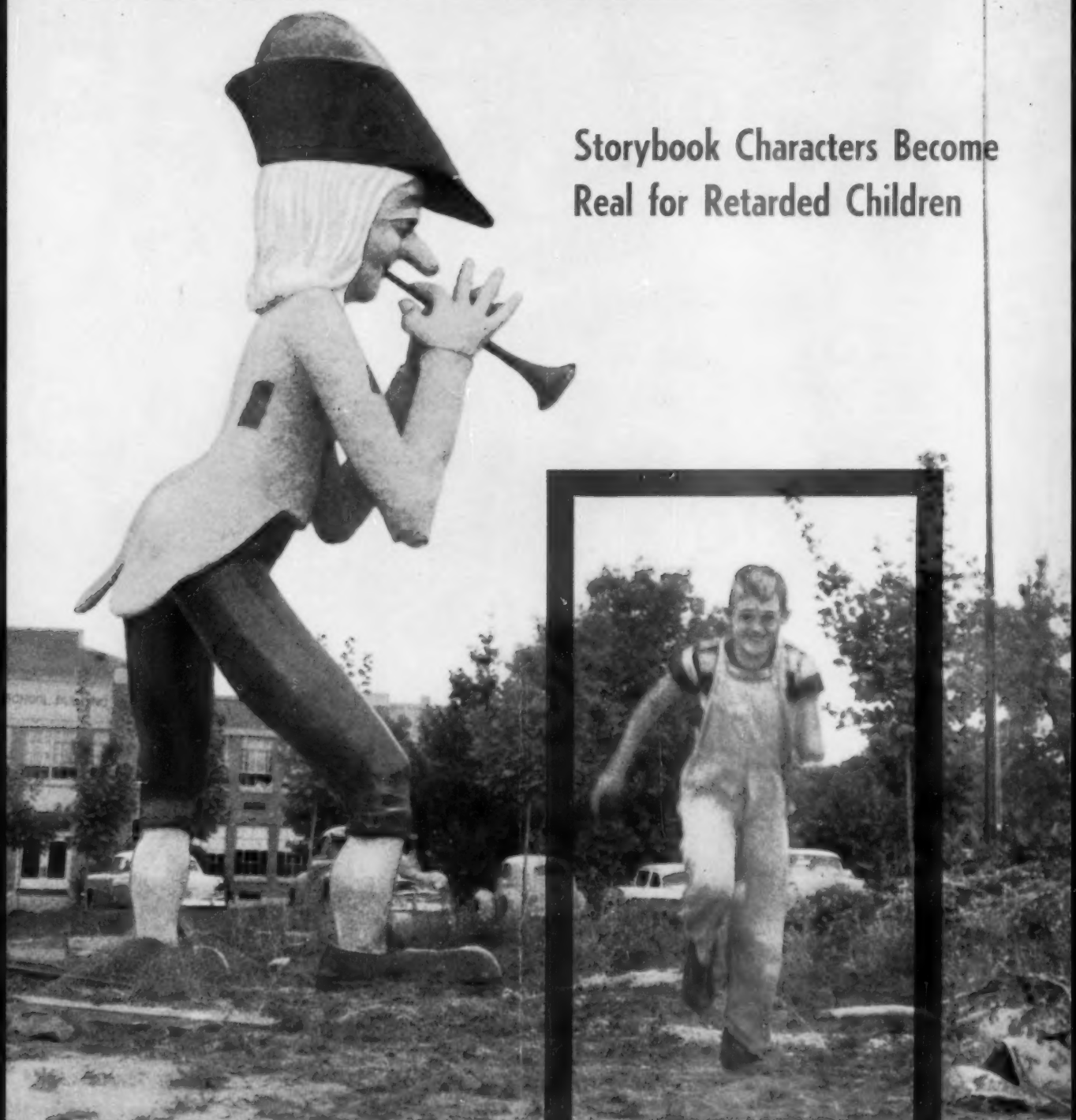
DECEMBER 1957

# CONCRETE

For producers of precast and prestressed concrete products and ready mixed concrete

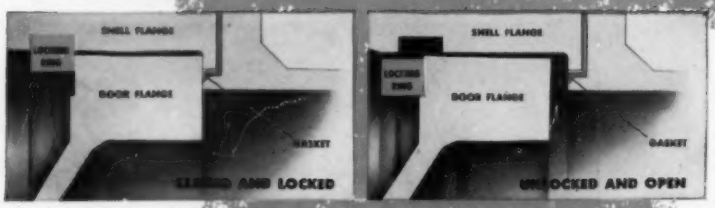
## Storybook Characters Become Real for Retarded Children



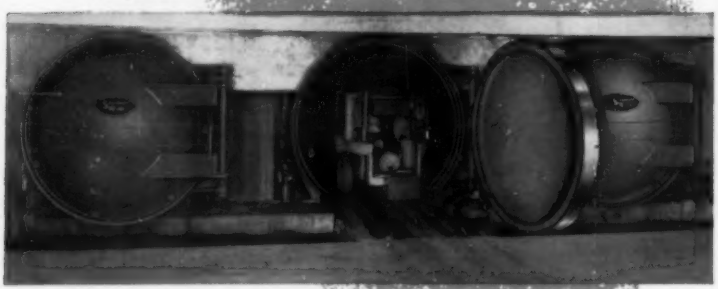
## Stress Arched Roof of Block

Looking for Positive

# QUICK OPENING DOORS?




Locking ring expands into shell flange forcing door flange into compression with resilient lip gasket for pressure or vacuum seal.



## ONE FAST, AUTOMATIC ACTION CLOSES AND LOCKS

Simplicity of operation is one of the outstanding features of Ring-Lok Doors. 45 seconds is all it takes to hydraulically open and close a Ring-Lok up to 12′ in diameter. Resilient lip-type gasket is used for positive sealing against pressure or vacuum. Applicable to either vertical or horizontal vessels, they can be used with working temperatures up to 400°F and pressures to 350 psi.

Look no further for closures that are low in initial cost, low in maintenance costs and high on performance. You'll find them every time in Struthers Wells Ring-Lok Doors.

## STRUTHERS WELLS PRODUCTS

**PROCESSING EQUIPMENT DIVISION**

Crystallizers . . . Direct Fired Heaters . . . Evaporators . . . Heat Exchangers . . . Mixing and Blending Units . . . Quick Opening Doors . . . Special Carbon and Alloy Processing Vessels . . . Synthesis Converters

**BOILER DIVISION**

BOILERS for Power and Heat . . . High and Low Pressure . . . Water Tube . . . Fire Tube . . . Package Units

**FORGE DIVISION**

Crankshafts . . . Pressure Vessels . . . Hydraulic Cylinders . . . Shafting . . . Straightening and Back-up Rolls

# STRUTHERS WELLS *Corporation*

TITUSVILLE, PA.

Struthers Wells

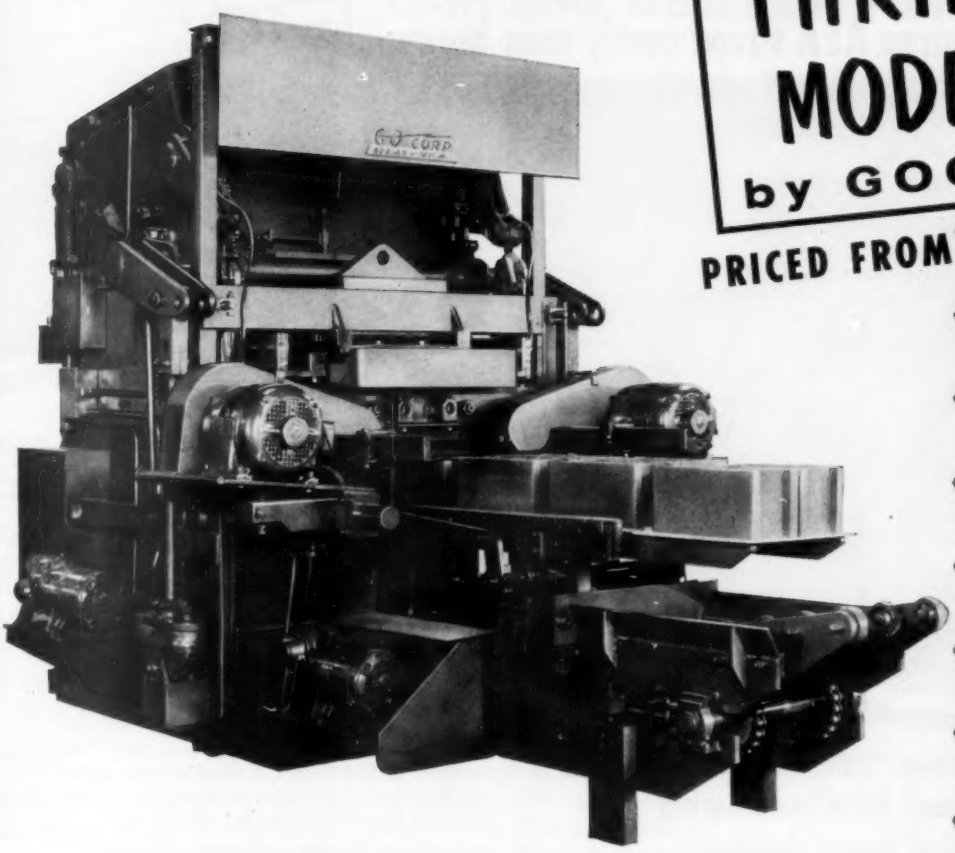
Plants at Titusville and Warren, Pa.

*Offices in Principal Cities*

# TRUSTEE

## THRIFTY MODELS by GOCORP

PRICED FROM $14,000.



## 2X and 2½X HYDRAULIC BLOCK MACHINES

(formerly GOCORP "JETS")

• **SPEED**—Conservatively rated at 600 good blocks per hour.

• **QUALITY BLOCKS**—Quick change feed and strip time controls to handle troublesome mixes • Automatic, low voltage height control • A block receiver that babies your blocks.

• **HYDRAULIC DRIVE**—For swift, smooth, effortless motions.

• **RUGGED**—Full 1" side plates—thoroughly cross braced • Motors, pumps, shafts, single acting cylinders are all oversized for real staying power • Plug stop reversing vibrator motors—no brake failures. Maintenance costs reduced to the minimum.

• **ACCESSIBLE—NO PIT REQUIRED**—Working parts are where you can get at them • Change full height molds in about 20 minutes—to other heights in about 30.

**FOR HIGHER PRODUCTION AT A LOWER UNIT COST, WRITE TODAY FOR YOUR BROCHURE ON THE FOUR TRUSTEE MODELS.**

### OTHER GOCORP PRODUCTS

**BLOCK MACHINES:** "Super" and "Special" Trustees (3X models), "Senior" and "King" (Plain Pallet); "Junior" and "Junior Twin" (cored pallet) • **RACKMAN**—the first proven automatic rack loading device • Mixers and Skip Loaders • Cubers and Offbearers • Allied Equipment.

GOCORP
ADRIAN-MICH.

403 Grace St. • Adrian, Michigan PHONE: COlfax 3-7168 • CABLE "GOCORP"

DEWEY AND ALMY

# DAREX Newscope

## How Darex AEA saved costly man-hours on St. Lawrence Seaway construction!

Contractors on the St. Lawrence Seaway realized important savings in time and money by adding DAREX AEA to concrete. They found that free pouring, air-entrained concrete needed less spading and vibration. Also, AEA reduced surface accumulation of water, shaving hours from the finishing operation.

DAREX AEA helps provide the top strength and durability Seaway walls require. Air-entrained concrete withstands sea water and cold weather... is highly impermeable... protects reinforcing steel from corrosion. Shown are Cote Ste. Catherine Locks, built by Canit-Canamount Construction Co.

## Daracone "raincoat" protects school from weathering and water damage!

To ward off water damage, the exterior walls of St. John the Evangelist School in Cambridge, Massachusetts, are treated with DARACONE water repellent. Reasons: to protect outside masonry exposed to rugged New England weather from spalling, efflorescence and leakage . . . to cut building maintenance costs. Contractor: R. A. Bossi Co. of Boston. DARACONE Distributor: Littleton Construction Specialties.

Silicone-base DARACONE penetrates and lines masonry pores and cracks without clogging. It repels water, yet allows the masonry to "breathe." Because DARACONE won't dissolve, wash or wear away, it has been guaranteed by waterproofing contractors for as long as 10 years.

## WRDA reduces excess water in concrete, increases workability and strength.

Ready mix plants like Riverside Sand & Gravel Co. of Newton Lower Falls, Massachusetts, are finding that WRDA, Dewey and Almy's new water-reducing agent in easy-to-use liquid form, produces a highly workable concrete mix... with top compressive strengths... while it cuts water content as much as 20 per cent.

Here's what a Riverside customer, Mr. William Ferro of Camfer Foundations, Lexington, Massachusetts, says about a typical house foundation job in nearby Waltham.

"On jobs like this, where the ready-mix truck can only get to one corner of the forms, I need a high slump concrete that will flow all around the forms without separating. That's why I use Riverside's concrete made with WRDA."

DEWEY AND ALMY CHEMICAL COMPANY

DIVISION OF W. R. GRACE & CO.

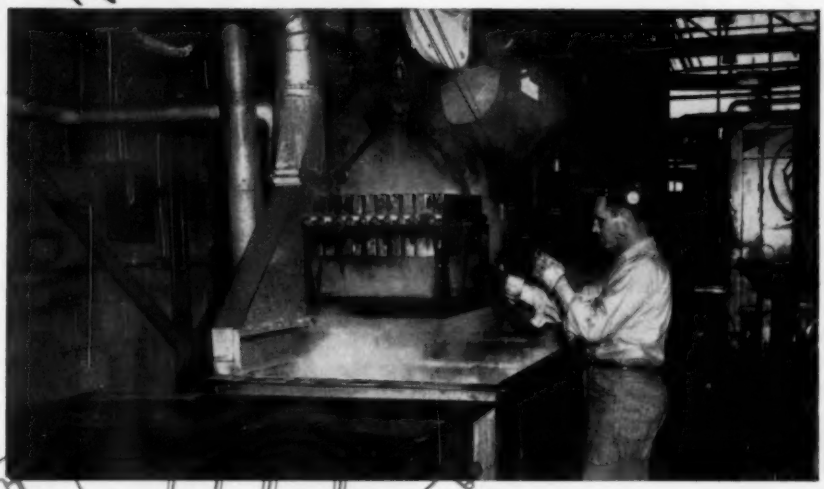
Cambridge 40, Mass. San Leandro, Calif. Montreal 32, Canada

403 Grace St. • Adrian, Michigan PHONE: Colfax 2-7168 • CABLE "GOCORP"

*You're Doubly Wise*

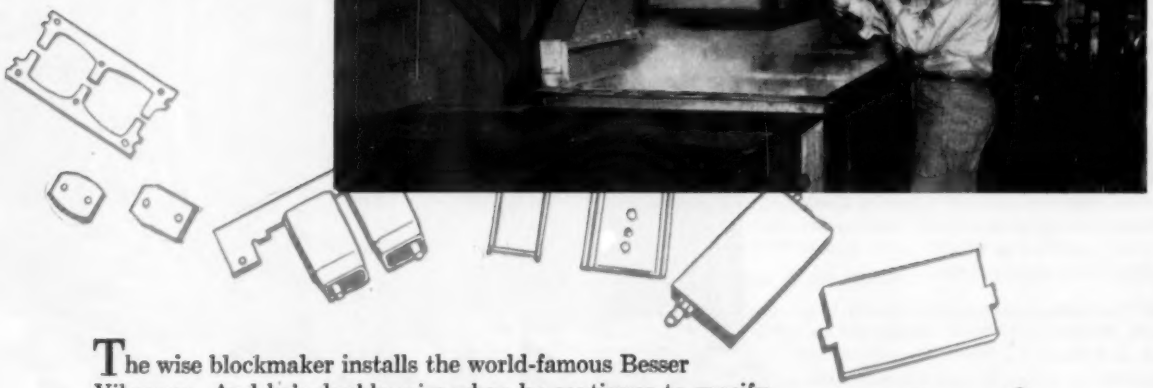
*when you* **BESSERIZE***

***Always Use Genuine BESSER Parts***

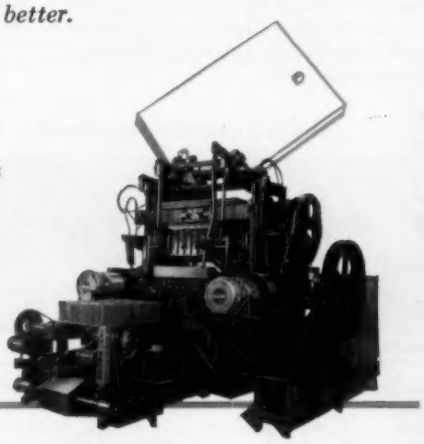


**PARKERIZING PROCESS**

Rustproofing Genuine Besser Parts. Accomplished by acid etching and oil bath . . . a licensed process approved by Army and Navy Ordnance.



The wise blockmaker installs the world-famous Besser Vibrapac. And he's doubly wise when he continues to specify GENUINE BESSER PARTS when replacements are necessary. Here's why. You get the same long-life performance originally built into the Besser Vibrapacs. The parts are precision made and completely interchangeable. You're assured of quality material plus thorough inspection. Made in the *same* plant, by the *same* skilled workers, using the *same* equipment . . . Genuine Besser Parts are the same as the parts used in the manufacture of new Vibrapac machines. *They can't be any better.*



## *BESSER Company*

DEPT. 127, ALPENA, MICHIGAN, U. S. A.

*Complete Equipment for Concrete Block Plants*

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Newark, New Jersey
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Mitchell 2-1434

BESSER Genuine PARTS



A7-128

# YOU GET MORE PROFIT...FASTER when you install a *Columbia* BLOCK MACHINE

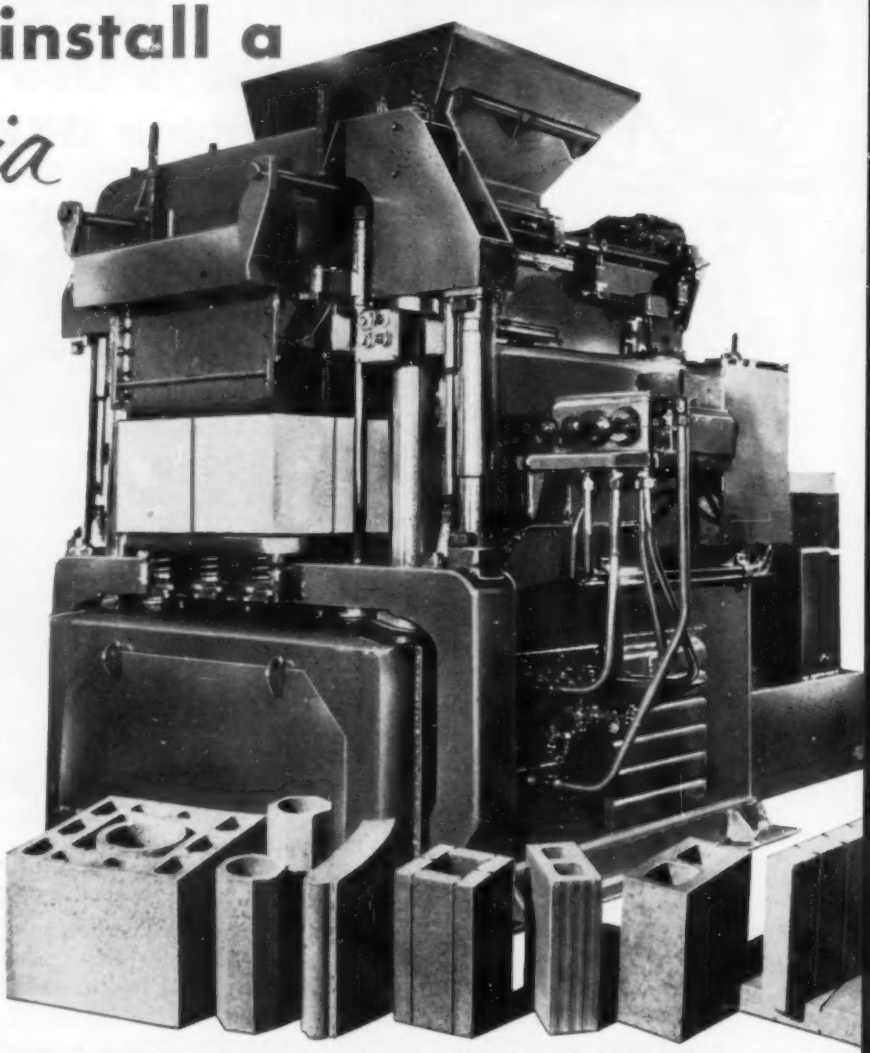
- ✔ lower initial cost
- ✔ lower maintenance costs
- ✔ less depreciation
- ✔ higher production

These four factors combine to give you the *lowest per block production costs* of any machine on the market today.

**COLUMBIA MACHINES ARE PRODUCTION GIANTS.** These electronically controlled, hydraulically powered block machines operate at more than 4 to 6 cycles per minute producing 8" x 8" x 16" blocks and faster with smaller units.

Columbia machines are available in the 12"-HIGH, Model 12 3-block, Model 10 2½-block, and Model 8 2-block. Engineered for production . . . ruggedly constructed of the finest steels . . . simple, yet effective, in operation . . . compact . . . widely tested both in the field and in Columbia's own complete experimental plant, the Columbia Block Machines are unique in the field.

**IT'S EASY TO OWN A COLUMBIA BLOCK MACHINE.** The low original price represents an easily amortized capital investment. *"FLEXIBLE PAY-AS-YOU-DEPRECIATE"* terms make you the owner of this profitable piece of concrete manufacturing equipment on a easy-to-pay basis.



**THE COLUMBIA 12"-HIGH—THE ONE MACHINE BLOCK PLANT**—is extremely compact, occupying only a minimum of plant space. It produces all three: 4"-high, 8"-high, as well as a wide variety of 12"-high special shapes and sizes—Roman brick, Norman tile, silo staves, water meter boxes, flue liners, partition block, hexagonal drain tile, special design face blocks. Machine is available in two sizes with mold openings 18"x24" & 17¾"x19¾"

*There is a Columbia representative in your area . . . for information call, write, wire*

**Columbia MACHINE** Home Office: 107 S. Grand, Vancouver, Wash.

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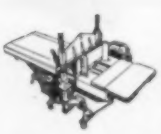
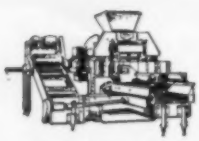
**MANUFACTURERS AND WORLD WIDE DISTRIBUTORS OF A COMPLETE LINE OF PLANT EQUIPMENT FOR PRODUCTION OF CONCRETE PRODUCTS**

CEMENT SILOS
BATCH BINS
ELEVATORS
SKIP HOISTS
OFF BEARERS

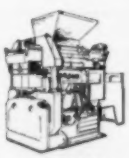


BLOCK SPLITTERS



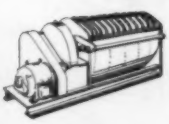
MAGNETIC RETURN

3-BLOCK



2½-BLOCK

2-BLOCK



BATCH MIXERS

PALLETS • RACKS
PRECISION MOLDS
TURNTABLES
PUMPING UNITS
CLEANERS & OILERS

December 1957

# CONCRETE

VOL. 65, No. 12 • EST. 1904 • PUBLISHED MONTHLY BY CONCRETE PUBLISHING CORP. • 400 W. MADISON ST., CHICAGO 6, ILL. • Central 6-8822

## FEATURES FOR THIS MONTH

**Story Book Characters Become Real for Retarded Children . . . . 23**

*Utah companies and skilled workmen pool their products and off-time hours to build a fairybook playground for children who will never grow up. By Moana B. Bennett*

**Cement Slurry Builds Stronger Block . . . . . 24**

*This talk, given by Harrie Clegg to the Southeastern Concrete Masonry Association, describes the results The Crume Brick Co., Dayton, Ohio, has had using a Cowles Dissolver to disperse cement in a slurry prior to mixing it with the aggregate.*

**Prestressed Arched Roof of Block . . . . . 26**

*Block, post tensioned in bow string trusses, give a 100 x 150-foot clear span to a roof of a supermarket at Alpena, Mich.*

**Employees Object: Don't Want Union . . . . . 28**

*Included are a letter from Vincent Ahearn, NRMCA executive secretary, and a memorandum from Association Counsel Mr. Horsky. Both take up a recent NLRB decision against the Teamster and an Oregon producer for attempting to compel the producer's employees to join an unwanted union.*

**They Produce Precast Concrete Wall Panels . . . . . 30**

*Tecfab, Inc., precasts wall panels up to 20 x 8 feet and ships them by truck within a 500-mile radius of their plant. Here's the story of how they do it. By Ornan B. Smart*

**What to Do about the New Income Tax Requirements . . . . . 32**

*Listed here are the recommendations of National Ready Mixed Concrete Association in regard to taxpayers reporting gross income and itemizing reimbursed expenses on their 1958 tax forms.*

**Southeastern Block Producers Meet at Memphis . . . . . 33**

*More than 200 people associated with the block industry gathered at Memphis' Claridge Hotel to discuss the problems and new improvements within the industry. Here is a report of the meeting.*

**Plan Your Working Capital . . . . . 35**

*This article takes up what working capital is, how a businessman should budget it, and how he may, if necessary, borrow money on inventory, etc., so as to have necessary capital in peak periods. By Edward F. Reiter.*

**The Time Is Now . . . . . 56**

*Is the lack of a realistic—and competitive—advertising and promotion budget a problem with the block industry? Philip Paolella believes it is, and so do we.*

## DEPARTMENTS

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DOUGLAS LEE, EDITOR

DONALD T. PAPINEAU, Publisher

NBP

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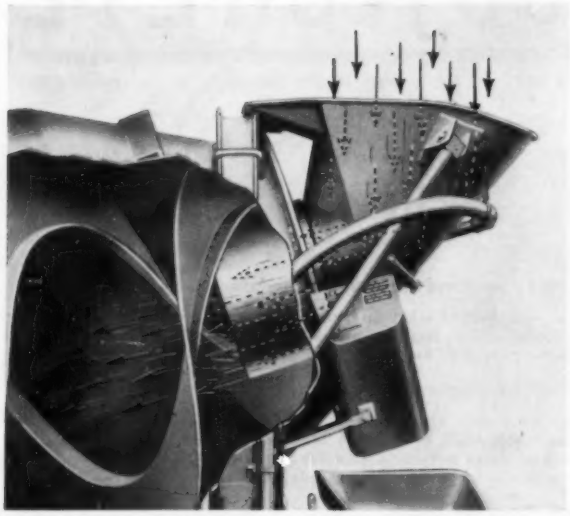
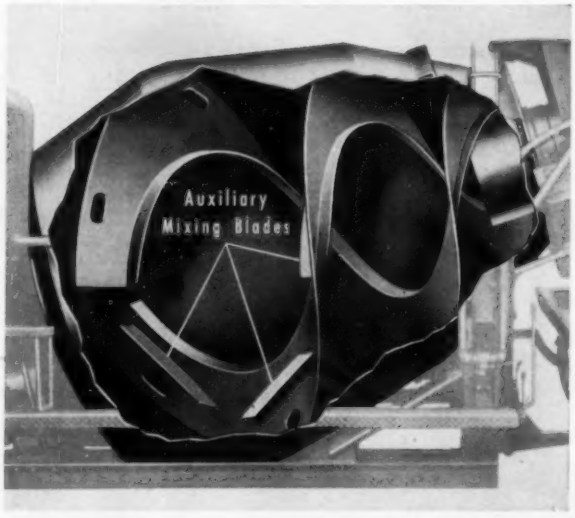
VAC

BLOCK SPLITTERS, MAGNETIC RETURN | 3-BLOCK | 2½-BLOCK | 2-BLOCK | BATCH MIXERS

# WESTINGHOUSE...

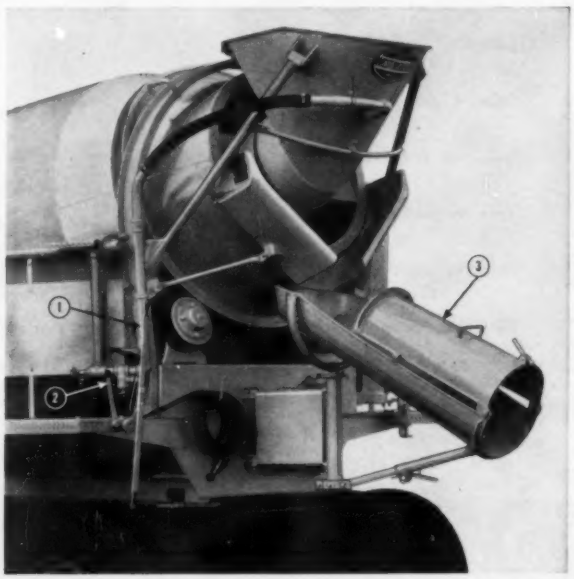


**FAST CHARGING...** With extra-large hopper and cone which shoots material directly to mixing section of drum, you can load as fast as you want—without blow-back. A Westinghouse will load faster than most mixers.




**FAST MIXING...** Spiral "L"-section mixing blades in drum are deeper than most and are equipped with 6 auxiliary blades which produce a double-mixing action. You get thorough, uniform mix of any load in jig time.

**CONTROLLED DISCHARGING...** Discharge any load, through large opening, as slowly or as fast as you want it—including low slump. Two-speed transmission provides wide drum r.p.m. range at efficient engine speeds—low speeds for agitating and closely-controlled discharge—high speeds for fast charging and discharging.




**SIMPLE, EASY OPERATION...** Single ever (1) at either end of mixer starts, stops and reverses drum rotation through planetary transmission—no shifting of any kind—nothing could be more simple. Adjacent engine throttle (2) controls drum speed. Swing-away, fold-over chute (3) with extension can be used in 5, 8 or 12 ft. length.

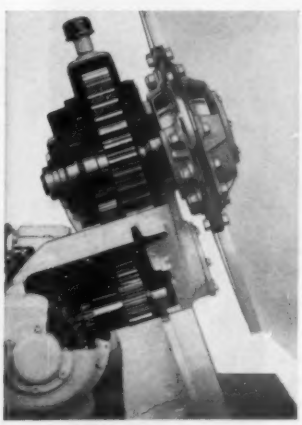
## See the New Westinghouse Truck Engine Drive

# All You Want in a Mixer

● Yes, sir—Westinghouse mixers give you performance unsurpassed by any and unequalled by most. They are simple, clean-cut and convenient in design—easy to operate, easy to service, easy to keep clean. They are sturdier and longer-lived than most and give you more dollar value. Check them from end to end and you'll agree.

And you'll like their exclusive enclosed-gear drum drive. Centrally located it drives drum through large, geared ball-and-socket which serves as the front drum mounting. This mounting absorbs all drum misalignment due to frame weaving when driving over uneven ground. Driving mechanism is not subjected to wear and breakages experienced with other drives.

Available in 5, 5½, 6 and 7 yd. sizes with separate engine or new truck engine drive—built to TMMB standards. Water systems and options available to suit your needs. See your local Westinghouse mixer dealer or write now for fully illustrated catalog to Westinghouse Transit Mixer Division, LeTourneau-Westinghouse Co., Indianapolis, Indiana (Member NRMCA and TMMB).

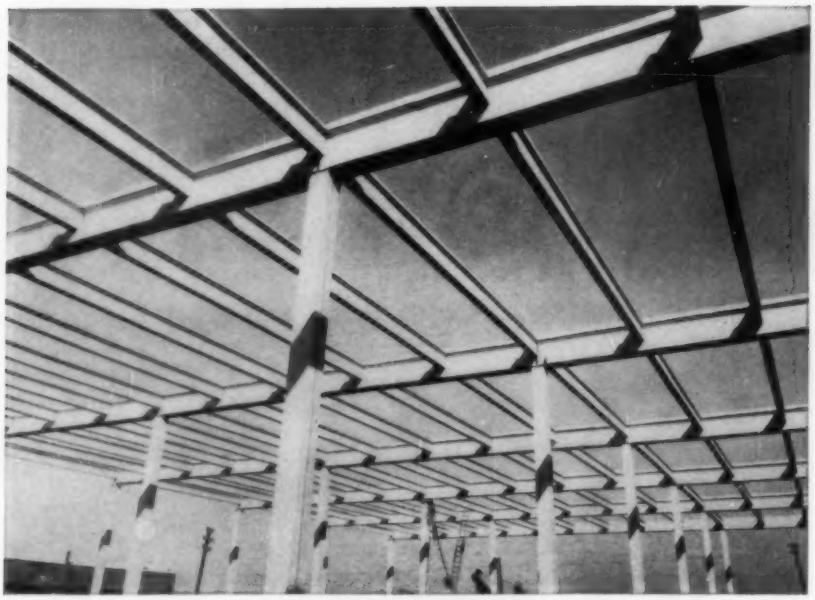


◀ **ENCLOSED-GEAR DRUM DRIVE . . .** No chains or exposed gears to wear out or break. Requires little attention and less maintenance. Exclusive, patented feature—nothing like it. Let us tell you about it.

**ENCLOSED-GEAR TRUCK ENGINE DRIVE . . .** ▶ Uses power from truck engine to drive drum. No separate engine needed. Enclosed spiral bevel gears used throughout—no belts to adjust or break. Lasts lifetime. Investigate this new money-saving feature.

## at NRMCA Show in Coliseum, Chicago, Feb. 10-13

# FRAMEWORK OF THE FUTURE IS GOING UP *Today!*



***New "Savarin" Coffee Plant of Slim, Clean Precast Concrete is Functional Beauty***

● This bright, light, efficient plant is proof of modern concrete's versatility, speed and economy of erection. The 130 columns, 95 girders and 425 purlins went up in just 7 working weeks.

## CHECK THESE CONCRETE FACTS

Here's what architect and owner want in a new building. Here's what precast and prestressed concrete gives them:

- a maintenance-free, corrosion-free structure
- elimination of fire hazard, hence favorable insurance rates
- streamline, smooth surfaces easy to keep clean, new-looking and sanitary
- flexibility for expansion through variety of shapes, sizes and weights made-to-order at no premium cost
- economy through speedy erection in days or weeks, from on-job or off-job casting plants
- immediate availability of units, produced as needed
- quicker starts, earlier finishes by using 'Incor' high early strength cement, in assembly line production through fast stripping and re-use of forms

Dependable 'Incor'*, America's first high early strength cement, is a major reason why precast, prestressed buildings such as this are the Framework of the Future rising everywhere *Today*.

*Reg. U. S. Pat. Off

Architects: **POMERANCE & BREINES**, New York City
Structural Engineer: **HARWOOD & GOULD**, New York City
General Contractor: **WALTER KIDDE CONSTRUCTION COMPANY** New York City
Precast Sections: **FORMIGLI CORPORATION**, Williamstown Jct., New Jersey plant

LONE STAR CEMENTS COVER THE ENTIRE CONSTRUCTION FIELD

## LONE STAR CEMENT CORPORATION

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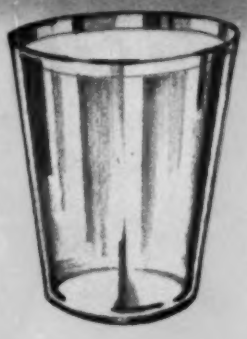
# NEVER A RIPPLE!

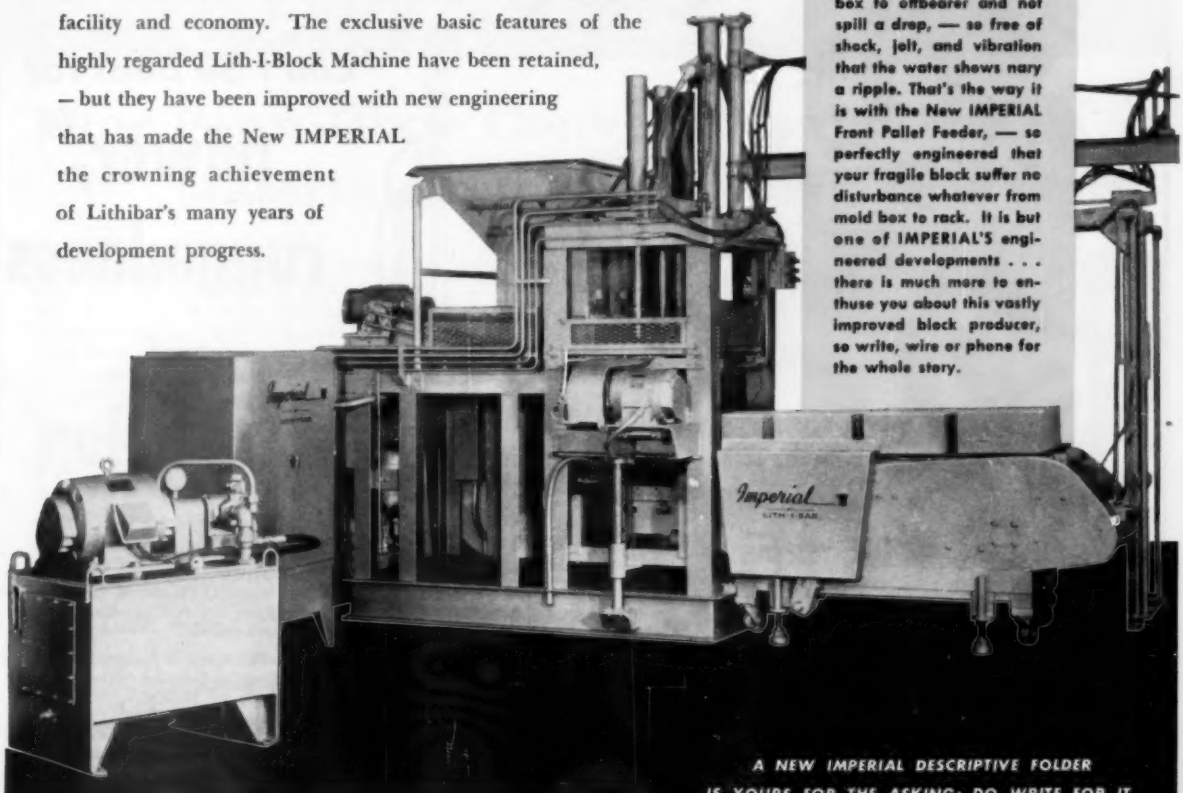
# Imperial



**A GREAT NAME,** heralding a Great New Day of low cost volume production of flawless block . . . a Great Machine that has been engineered to meet the challenging needs of obtaining the highest profit margins with the least of capital expenditure. The New IMPERIAL is now ready to go to work for you — in three- and two-block models, — the only fully automatic, hydraulic producer in its class with a front pallet feeder and off-bearer that are the perfected answers to greater production facility and economy. The exclusive basic features of the highly regarded Lith-I-Block Machine have been retained, — but they have been improved with new engineering that has made the New IMPERIAL the crowning achievement of Lithibar's many years of development progress.

## *UNCANNY SMOOTHNESS*

**. . . so smooth that a tumbler of water can ride a front feed pallet from mold box to offbearer and not spill a drop, — so free of shock, jolt, and vibration that the water shows nary a ripple. That's the way it is with the New IMPERIAL Front Pallet Feeder, — so perfectly engineered that your fragile block suffer no disturbance whatever from mold box to rack. It is but one of IMPERIAL'S engineered developments . . . there is much more to enthuse you about this vastly improved block producer, so write, wire or phone for the whole story.**



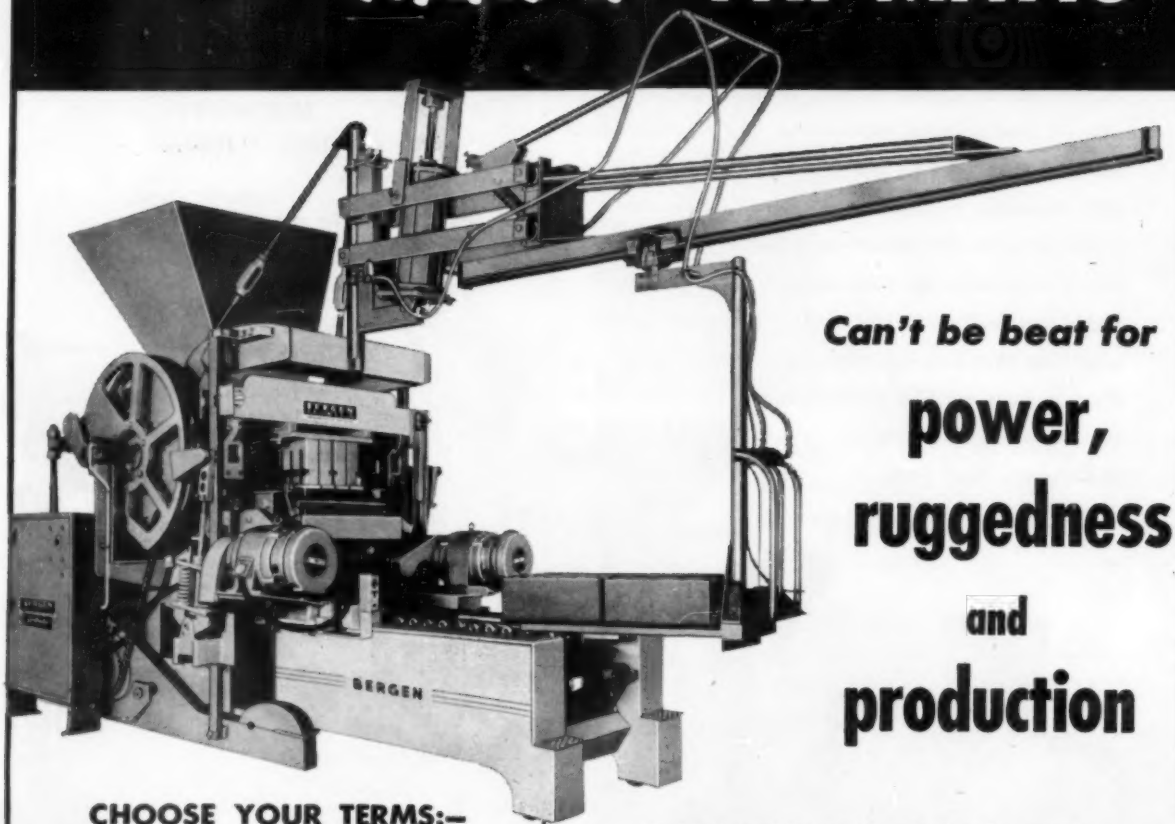
"In the development of the new Imperial we have drawn upon the latest technical know-how to make it the most advanced in the industry. In actual production use we have found the engineered improvements to be a wonderful plus to an already superior machine."

**Byron F. Campbell**
**Vice President and**
**Director of Engineering**

*A NEW IMPERIAL DESCRIPTIVE FOLDER IS YOURS FOR THE ASKING; DO WRITE FOR IT.*

THE LITHIBAR COMPANY
HOLLAND, MICHIGAN

# NO BETTER Block Machine than a TRI-MATIC




***Can't be beat for***

**power, ruggedness and production**

**CHOOSE YOUR TERMS:—**

**1. CASH**

**2. TIME PAYMENTS**

**3. "LEASE-WITH-OPTION-TO-BUY" CONTRACT**

(NON-ROYALTY, FIXED MONTHLY PAYMENT)

No block machine on the market today exceeds the TRI-MATIC for the essential features of heavy-duty construction, designed for and producing the finest block at maximum speed.

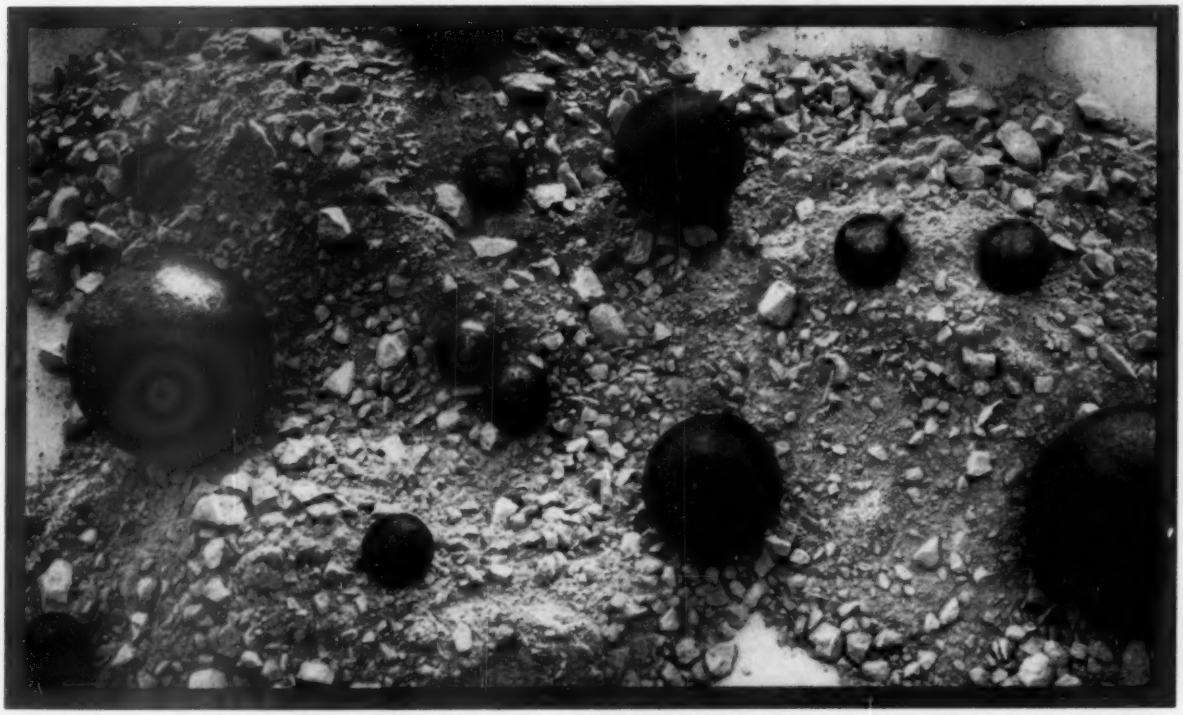
If you want high production, Tri-Matic is designed to run without strain at rates up to 6 mold cycles per minute, yielding an average of 10,000 — 8" equivalent units per typical 10 hour day. If you want power and ruggedness, just check the size of all motors, shafts, pulleys, etc. . . . AND — not one ounce of quality workmanship or material is sacrificed ANYWHERE on a TRI-MATIC.

Compare a TRI-MATIC WITH ANY MACHINE ON THE MARKET—you'll see why the BERGEN TRI-MATIC can't be beat!

**BERGEN**
MACHINE & TOOL CO., INC.

**NUTLEY, NEW JERSEY**

Cable Address: "BERGENCO" (Nutley, N. J.)



# How Penn-Dixie Converts the Raw Materials into a Smooth Liquid Form

Shown above is the blended mixture of limestone, shale, iron ore, sand and samples of steel grinding balls. The blended mixture, with water added, is fed into huge revolving cylinders containing thousands of these tumbling steel balls. These balls, ranging in size from three and a half inches to one inch, crush and grind the material into a smooth, fine-grained consistency. This process is called "pulverization".

This smooth, creamy mixture called "slurry" is then pumped to storage tanks where it is carefully mixed and blended. From there it is pumped into kiln feed basins where constant agitation keeps the materials in suspension awaiting the next step—the burning process.

Penn-Dixie's lab is always on the job making detailed analyses of each batch of slurry to insure that exact specifications have been met all along the line. This round-the-clock testing is your guarantee of Penn-Dixie quality.

***Penn-Dixie means Permanent Dependability***

**OFFICES**

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**PENN-DIXIE CEMENT** *Corporation*

# *Plenty of Hot Water*

keeps your Redi-Mix plant operating through the winter... **and more profitably** when using

**Burkay®**

GAS-FIRED
WATER HEATERS

*says ARROW Sand & Gravel Company*
**Columbus, Ohio**

The Arrow Sand & Gravel Company discarded clumsy, expensive and inefficient coal-fired equipment used for heating the water needed in their winter concrete mixing operation. They replaced it with three **Burkay** Model 718 units using the existing storage tank. There was a large saving in initial investment over the previous installation. Also, substantial savings in fuel cost... in space.

FREEZING temperatures need not halt your winter Redi-Mix operation. Not when you can have all the hot water from *Burkay* water heaters that you want, when you want it, and at any temperature you want so that the concrete can set before it freezes. You can supply builders and contractors through the year on schedule.

Rugged *Burkay* gas-fired industrial water heaters are the simple answer to mixing concrete dependably during freezing weather. The entire heater operation is automatic. *Burkays* require minimum care and maintenance. Compact, they fit in any out-of-the-way place. Any number of heaters can be connected up to get the volume and temperature of water you need for your plant. They will more than pay for themselves in reduced year 'round overhead. Call your A. O. Smith distributor for full information and installation details.

Three Model 718 **Burkay** heaters and a storage tank provide 1800 gallons per hour of 110 degree water. Installation was designed by John W. Cordray of Graf & Son, Columbus, Ohio.

**Burkay** industrial water heaters are of "all copper," corrosion-free construction • Highly efficient patented burner • Exclusive heat exchanger for maximum heat transfer and economy • Dependable • Long Life • Compact • Operates on all gases • A.G.A. approved • Bears the A.S.M.E. seal of approval • Completely automatic • Complete range of sizes to fit your needs • Fully guaranteed.

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**PERMAGLAS DIVISION • KANKAKEE, ILL.**
**International Division, Milwaukee 1, Wisconsin**

***Send for FREE information***

A. O. SMITH CORPORATION
Permaglas Division, Kankakee, Illinois Dept. C-1257
**Gentlemen:** Please send me full details on **Burkay** gas-fired industrial water heaters for any Redi-Mix plant.

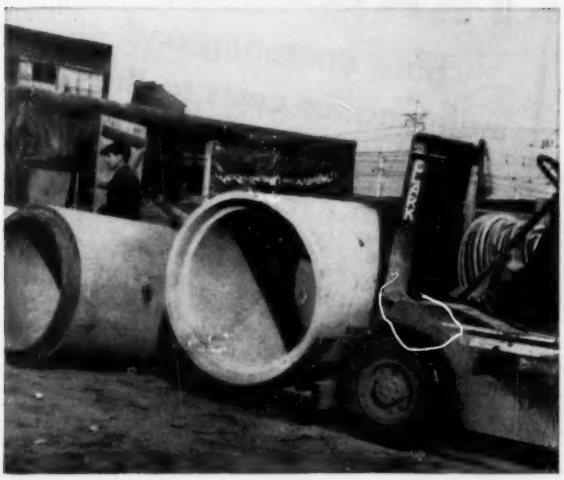
Name.....Title.....
Company.....
Address.....
City.....Zone....State.....

*makers of famous* **Permaglas®** *glass-lined water heaters...* **Permaglas®** *heating and cooling*

# *better concrete faster and cheaper with COLUMBIA CALCIUM CHLORIDE*

Making a Calcium Chloride solution at ready mix plant for automatic dispensing

Precast concrete pipe made with Calcium Chloride is ready for quick shipment



## *IN READY MIX*

Ready mix producers can render a genuine service to customers by recommending the use of Columbia Calcium Chloride—especially at temperatures below 70°F. when the set and strength of plain concrete are greatly retarded.

You can add Columbia Calcium Chloride to the mix either at your plant, or on the job. Columbia Calcium Chloride is easily controlled in either flake or liquid form. Here's what it does for your customers:

- Makes initial and final set three times faster
- Increases workability
- Increases early and ultimate strength
- Releases forms faster for re-use
- Cuts down on overtime
- Helps meet work schedules

Start now! Recommend the addition of Columbia Calcium Chloride to your ready mix customers.

## *IN CONCRETE PRODUCTS*

Whether your concrete products are blocks, pipe, precast or prestressed units, the use of Columbia Calcium Chloride will improve production and lower manufacturing costs. Here are some of the advantages:

- Reduces time required for initial set
- Gives higher early strength
- Reduces curing time
- Reduces cracking
- Allows for quicker handling
- Reduces breakage
- Permits earlier shipping

These advantages are especially important during cold weather. Calcium Chloride is not an anti-freeze, but the time required for protection in freezing temperatures is shortened, often as much as 50 percent. Columbia Calcium Chloride works equally well with normal, air-entrained and early high strength cements.

**WRITE TODAY FOR COMPLETE INFORMATION . . . PLEASE SPECIFY WHETHER YOUR INTEREST IS IN READY MIX OR CONCRETE PRODUCTS**

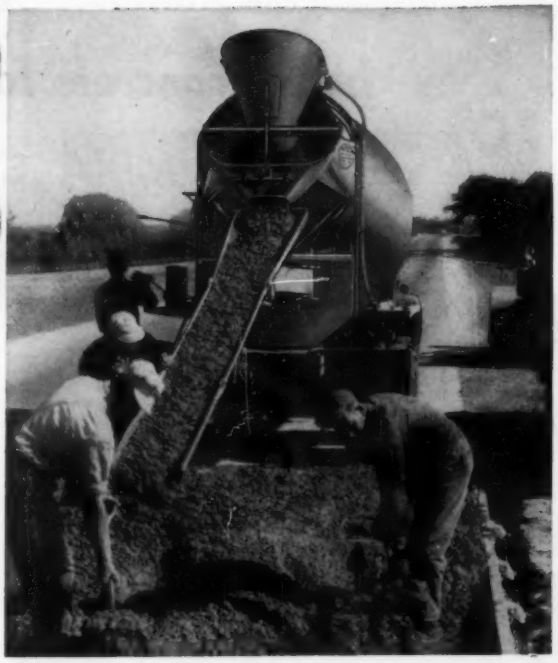
COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Cincinnati · Charlotte · Chicago · Cleveland · Boston New York · St. Louis · Minneapolis New Orleans · Dallas · Houston · Pittsburgh · Philadelphia · San Francisco
IN CANADA: Standard Chemical Limited and its Commercial Chemicals Division

# New TED* TRANSCRETES

. . . pare operating and maintenance costs to the bone . . . put bigger profits in every pour!

*Truck Engine Drive



Cut-a-way above shows how power is taken from front of engine and transmitted simply, efficiently to drum drive unit.

TED Transcrete users report up to $55 a month per machine saving on gasoline alone.

Drum rotation is subject *ONLY* to truck throttle variations . . . giving almost constant drum r.p.m.

Has all the job tested, time proven BIG PERFORMANCE features of other Transcretes — including trouble-free Floating Drive and Swing-Out Hopper. YOUR GUARANTEE OF FASTER CHARGING, MORE THORO MIXING, QUICKER DISCHARGE — AT LESS COST!

***Get full details today. Write for New FREE illustrated TED TRANSCRETE Folder***

**CONSTRUCTION MACHINERY CO., WATERLOO, IOWA**

**CHICAGO**
**February 10-13, 1958**

**Show days:**
Monday, Tuesday, Wednesday
Thursday morning

at both the Coliseum
and Conrad Hilton

**Convention days:**
Wednesday, Thursday, Friday

**NOTE:** 2 full show days free
from convention meetings

**Acres of**
**Money-Making Ideas**

Fast, free bus service

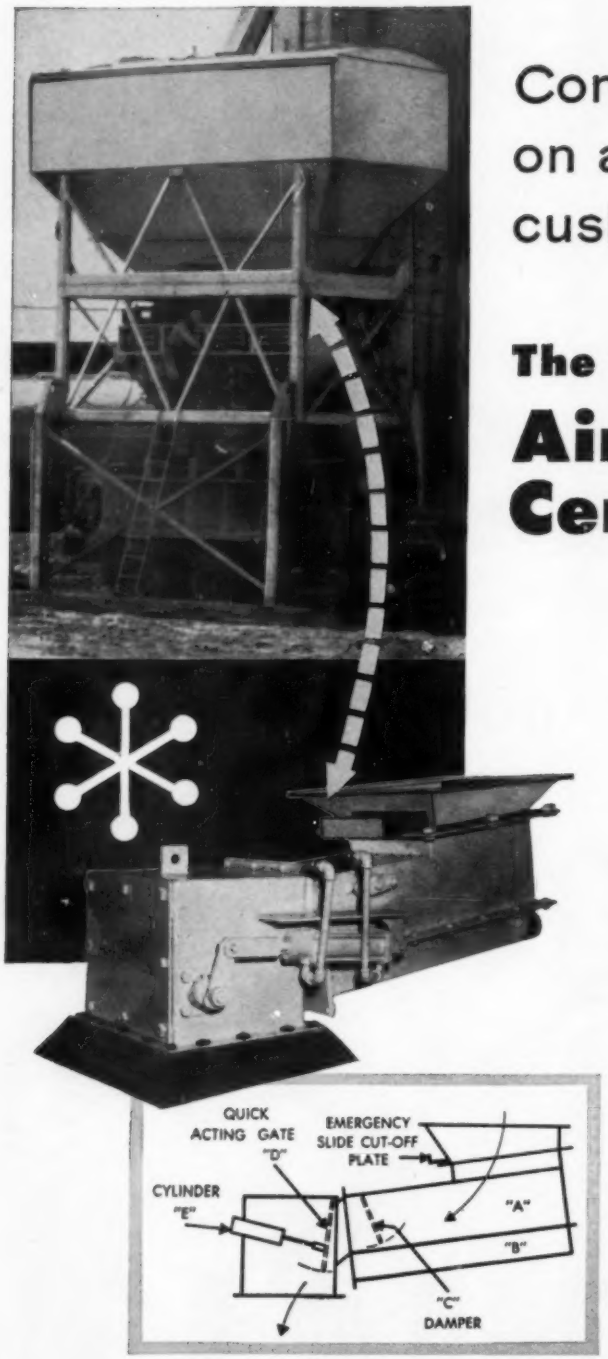
**DON'T MISS IT!**

# BIENNIAL SHOW

NSGA
NATIONAL SAND AND GRAVEL ASSOCIATION
42nd ANNUAL CONVENTION

NATIONAL READY MIXED CONCRETE ASSOCIATION
NRMCA
28th ANNUAL CONVENTION

All registrations in lower lobby of the Conrad Hilton, starting Friday, February 7. Registration and Show admission free to producers and users of sand, gravel and ready mixed concrete.




# Convey your cement on a trouble-free cushion of air . . .

## The new BUTLER Airflomatic* Cement Feeder

REPLACES your present cement feeding system with the *positive*, efficient, new BUTLER *Airflomatic*. No bolts or drives to shear. No pins to shear. No clutches to slip. No moving parts except a stream of air. You have *precision* feeding at all times — day in and day out. No down-time because of feeder trouble.

, Cement literally rides on a cushion of low pressure, large volume air provided by a blower attached to the batcher platform. The blower also *aerates and fluffs the cement in the overhead bin* far more effectively than a costly compressor. No jets for additional air are required. Having extensively field tested the Airflomatic Feeder, BUTLER now makes it standard equipment on the sensational TX-4 Roadbuilders and the Ready-Mixed Plants.

*BUTLER offers the Airflomatic Cement Feeder for installation on all batching plants regardless of the make. The Airfllomatic is simple and easy to install wherever a vane feeder has been used.*

Write to BUTLER BIN COMPANY for complete information and prices. Use the coupon if it is more convenient. Just a postcard will do, if you prefer.

**BUTLER BIN COMPANY**
991 Blackstone Avenue
Waukesha, Wisconsin

**BUTLER BIN COMPANY**
991 Blackstone Avenue
Waukesha, Wisconsin

Please send full description and prices of the BUTLER AIRFLOMATIC Cement Feeder.

Name .....
Company .....
Street .....
City ..... State .....

*We now have a Ready-Mixed Plant* ☐ *Highway Batching Plant* ☐ *manufactured by*.....
.....

# INDUSTRY NEWS

## NCMA Board Approves Adding Sixth Region

NCMA's board of directors approved dividing the association's membership into six regions, rather than the five originally announced.

Approval of this action came at a special meeting of the board, Nov. 6, following the Southeastern Masonry Association's meeting at Memphis.

The new region comprises roughly the states of North and South Dakota, Iowa, and those adjacent, excluding Illinois. According to Walter Underwood, executive director of the NCMA, the reasons for adding another region were geography, membership population, and the nature of construction in the new region.

As in the earlier announced plan, one vice president and three directors will represent each region on the national board. They will be elected to office by NCMA members in their respective regions. Voting will be staged by mail ballot, and the winners will be announced next February at the association's annual convention in Chicago.

■

## ACI Officer Candidates Announced by Committee

Nominees for office in the American Concrete Institute have been announced by T. Y. Lin, chairman of the nominating committee.

Douglas McHenry, director of development, Portland Cement Association, Chicago, Illinois, is the presidential nominee for a one-year term. He has served as chairman of the TAC and of committee 209, volume changes and plastic flow in concrete, and was a member of the board of direction in 1955.

J. W. Kelly, professor and vice-chairman, department of civil engineering, University of California, Berkeley, California, has been nominated to a two-year term as vice-president. He has served as chairman of committee 611, inspection of concrete.

The four nominees for three-year terms as directors are: A. Amirikian, chief design engineer, Bureau of Yards and Docks, U. S. Navy, Washington, D. C.; S. J. Chamberlin, professor of theoretical and applied mechanics, Iowa State College, Ames, Iowa; Bryant Mather, chief of the Special Investigations Branch, Concrete Division, Waterways Experiment Station, Corps of Engineers, U. S. Army, Jackson, Mississippi; and Cedric Willson, vice-president and chief engineer, Texas Industries, Incorporated, Fort Worth, Texas.

● Let the NCMA Christmas card express for us the wish that all in the concrete industry enjoy the holidays and look forward to a prosperous new year.

● Officers and directors were elected by the New York State Concrete Masonry Association at the annual meeting October 24 and 25. Seated in the front row from left are: Alfred L. Cossitt, Cossitt Concrete Products, Inc., Hamilton, — vice-president; Salvatore J. Picone, Picone Bros., Brooklyn — secretary; Lawrence Dagostino, Dagostino Building Blocks, Schenectady — president; and Benjamin H. Palmer, Jr., Southern Tier Concrete Products Co., Alfred — treasurer. New directors, standing from left, are: Grant N. Reinhold, Anchor Concrete Products, Inc., Buffalo; William C. Homer, Barnes & Cone, Inc., Syracuse; Frederick W. Reinhold, Anchor Concrete Products, Inc., Buffalo; Ralph J. Dalbey, Comac Builders Supply Corp., Rochester; Edward Spevack, Smithtown Concrete Products Corp., Smithtown; and Henry C. Quaritius, Jr., Nailable Cinder Block Corp., Brooklyn.

● William M. Bird & Co., Inc., sales agents for the Tidewater Concrete Block and Pipe Co., Charleston, South Carolina, opened a warehouse and office building at Charleston last month. It was constructed of Tidewater products and other materials distributed by the company to demonstrate the effectiveness of combining concrete masonry with other building materials.

## Louis Howson Is Elected President of Engineers

The American Society of Civil Engineers elected Louis R. Howson of Alvord, Burdick, and Howson, Chicago, Illinois, as president for one year. Mr. Howson succeeds Mason G. Lockwood, of Houston, Texas.

Two vice-presidents who took office are Waldo G. Bowman, editor of Engineering News-Record, New York City, and Samuel B. Morris, consulting engineer and general manager of the City of Los Angeles Department of Water and Power. They will serve for two years.

New directors elected to three-year terms are: Professor Weston S. Evans, head of the department of civil engineering, University of Maine; Craig P. Hazelet, Hazelet and Erdal, Louisville, Kentucky; Donald H. Mattern, chief of the project planning branch of the Tennessee Valley Authority, Knoxville, Tennessee; John E. Rinne, Standard Oil Company of California, San Francisco; Philip C. Rutledge, Moran, Proctor, Mueser and Rutledge, New York City; and Tilton E. Shelburne, director of Virginia Council of Highway Investigation and Research at Charlottesville.

## Production of Shadowal Block Is Well Under Way

The National Concrete Masonry Association reports that 174 of its members in the United States are producing Shadowal block. In addition there are six companies in production in Canada, one in Puerto Rico, and one in Hawaii. The name Shadowal recently was approved as a registered trademark.

■

## Date Changed for Course on Prestressed Concrete

The date of the 2nd national short course on prestressed concrete, cosponsored by the department of civil engineering of the University of Florida and the Prestressed Concrete Institute, has been changed to January 27-31, 1958. The course will be held at Ellinor Village, Daytona Beach, Florida.

Registration with the Civil Engineering Department, University of Florida, Gainesville, Florida, will be closed January 1, 1958.

## Calendar . . .

**1958**

| | |
|---|---|
| **JANUARY 19-23** | National Association of Home Builders — Convention and Exposition — Hotel Sherman and Conrad Hilton Hotel — Chicago, Illinois. |
| **JANUARY 22-23** | Wisconsin Concrete Products Association — 38th Annual Convention —Loraine Hotel — Madison, Wisconsin. |
| **JANUARY 27-31** | National Prestressed Concrete Short Course — University of Florida — Ellinor Village — Daytona Beach, Florida. |
| **FEBRUARY 9-12** | Mason Contractors Association of America — 8th Annual Convention and Show — Mark Hopkins Hotel — San Francisco, California. |
| **FEBRUARY 9-13** | National Ready-Mixed Concrete Association Convention and Exhibition — 28th Annual Convention — Chicago, Illinois. |
| **FEBRUARY 9-13** | National Sand and Gravel Association — Annual Convention and Exhibition — Conrad Hilton Hotel — Chicago, Illinois. |
| **FEBRUARY 10-14** | American Society for Testing Materials — Committee Week — Hotel Statler — St. Louis, Missouri. |
| **FEBRUARY 17-19** | National Concrete Masonry Association — 38th Annual Convention — Chicago, Illinois. |
| **FEBRUARY 17-19** | National Crushed Stone Association — 41st Annual Convention — Conrad Hilton Hotel — Chicago, Illinois. |
| **FEBRUARY 24-26** | National Concrete Products Association of Canada — Annual Convention — Seigniory Club — Montebello, Quebec, Canada. |
| **FEBRUARY 24-27** | American Concrete Institute — 54th Annual Meeting — Morrison Hotel — Chicago, Illinois. |
| **FEBRUARY 26-28** | American Society of Civil Engineers — National Convention — Chicago, Illinois. |

## Canadian Firm Names Gordon Farrell President

Ocean Cement and Supplies Limited, of British Columbia, Canada, recently announced the appointment of Gordon Farrell as president. The company is an amalgamation of Evans Coleman and Gilley Brothers, which operated 11 subsidiary firms in British Columbia and Alberta, and British Columbia Cement Company, Limited.

Before the merger, Mr. Farrel served as president of Evans Coleman and Gilley Brothers, and was a director of the British Columbia Cement Company.

■

## Catalog on Prestressed Concrete Cylinder Piles

Manufacture and installation of prestressed concrete pile is discussed and illustrated in literature published by Raymond Concrete Pile Company, 140 Cedar Street, New York 6, New York.

Entitled "Raymond Cylinder Piles of Prestressed Concrete," the catalog includes information on the merits of the prestressed units, for foundations of bridges, waterfront and offshore structures. Versatility and economic applications of the pile and related prestressed products are also discussed. The catalog is available from the company on request.

■

## PCA Conservation Bureau Head, E. Wenger, Retires

E. C. Wenger, manager of the conservation bureau of the Portland Cement Association since 1947, retired from the association December 1. He plans to practice as a consulting engineer in the highway and municipal improvement field. Mr. Wenger has been a member of the association staff since 1934. For 13 years he was regional highway engineer in the association's midwest region.

Before going with the Portland Cement Association Mr. Wenger served the Illinois State Highway Department for six years.

# Rocket Truck Mixers

***are built to help YOU make money!***

Rugged and serviceable, the Rocket gives you over the years savings in lower operating and maintenance costs. And compared to other high quality mixers, it costs less initially. Look at all these features included in the Rocket's one low cost.

**Fast charging** . . . open-end loading permits quick charging, without spillage, through a large, unobstructed hopper.

**Fast, thorough mixing action** . . . unique blade design produces a folding and mixing action that results in concrete of uniform quality. A thorough, fast mix and fast discharge is assured.

**Hydraulically controlled chute** . . . saves time and energy. Operation controls are grouped at rear of mixer for positive discharge control, accurate chute placement. And your drivers will like the light-weight, 48" aluminum extension chute.

**Low maintenance** . . . 3/16" abrasion resisting steel drum with double-flanged head gives added years of operation with hard use.

**Light weight** . . . as light or lighter than any comparable model, but with no sacrifice of quality. You can haul a maximum amount of concrete without exceeding the legal limits.

**The Rocket's one low price also includes** . . . a mechanical revolution counter and RPM indicator to handle specification work . . . positive chain drive that transmits flexible power, not affected by truck twist or road shock . . . a Chrysler engine with fluid coupling . . . and many more features you would normally pay extra to get.

Models available in NRMCA approved capacities of 3½, 4, 5, 5½, 6 and 7 cubic yards. Front engine PTO optional.

For a high quality mixer that costs less to own . . . less to operate . . . see your Rocket distributor or write:

**CONCRETE TRANSPORT MIXER COMPANY**

**4983 Fyler Ave., St. Louis 9, Mo.**

**FLanders 2-7800**

● Santa Claus had no problem in steering a steady course last year. The Ready Mix Concrete Company, Fort Lauderdale, Florida, generously offered him the use of the conveyor that carries aggregate to the batching plant. In return, Mr. Claus served the company in a public relations capacity during the Christmas season.

## Shadowal House Unsold; Still Declared Success

The Shadowal house which was a part of the Milwaukee, Wisconsin, parade of homes this year (CONCRETE—October 1957) was considered a success, according to the *Milwaukee Journal*. Over 30,000 persons went through the house and it was well received. Best Block Company of Milwaukee supplied the concrete units for its construction.

Despite its reception the house has not yet been sold. An explanation in the *Journal* is that the house is situated between lower priced homes, and that the interior equipment and design place the price beyond the pocketbooks of those who have been interested. Prospective buyers are unsure of what they want left out to bring the cost down to their means.

Both the builder, Heaviland Corporation, Milwaukee, and the architects, Maynard Meyer and Associates, Milwaukee, are enthusiastic about construction with concrete masonry. Heaviland is planning to build another house of concrete masonry for the 1958 parade of homes.

■

## PCI Begins Plans for the 1958 Annual Convention

Philip Balcomb, director of the Prestressed Concrete Institute, has been appointed chairman of the general arrangements committee for the 4th annual membership meeting and convention of the institute next September. Charles C. Zollman, chairman of the institute's technical activities committee, is the program chairman of the meeting, which will be held at the Edgewater Beach Hotel, Chicago, Illinois, September 21-26, 1958.

## Jackson R.M. Appoints Three Divisional V-P's

Jackson Ready-Mix Concrete, Jackson, Mississippi, recently promoted three men to vice-presidential positions in charge of the company's three divisions.

Mott L. Pevey, Jr., is the vice-president in charge of the prestressed concrete division. He is a charter member and former director of the National Prestressed Concrete Institute.

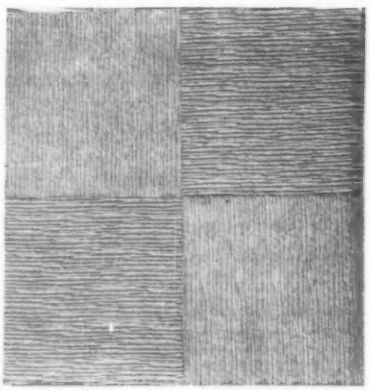
New vice-president in charge of the ready-mix division is George Nichols, who has been associated with Jackson Ready-Mix for 11 years. Mr. Nichols is a member of the American Concrete Institute and of the Mississippi Concrete Association.

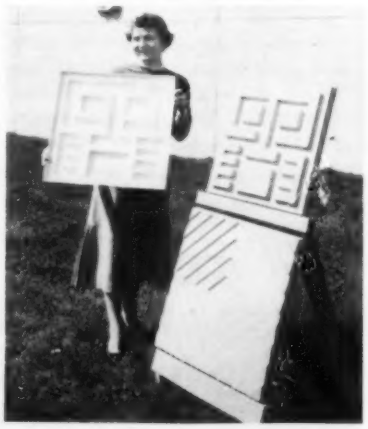
Dale Cobb, former president of the Autoclave Building Products Association, has been appointed vice-president in charge of the masonry products division. Mr. Cobb is also a member of the American Concrete Institute.

## Plastic and Rubber Form Liners Vary the Surface Texture of Concrete Block, Precast Concrete Panels

A variety of textures and patterns for concrete surfaces can be produced with plastic and rubber form liners developed by the Portland Cement Association. They form either crisp patterns or glossy surfaces much like glazes which require no cleandown, grinding, or finishing.

The liners can be used in precasting concrete panels and for facing concrete block. Best results are obtained when the patterns are no deeper than ½-inch and edges and corners are rounded.





Both plastic and rubber form liners are reusable and need no form oil or bond breaker. No special concrete mix is necessary to achieve good results, and both lightweight and heavyweight aggregates are suitable, according to the Portland Cement Association. Textured and patterned liners can be used for horizontally precast panels, but only textured liners have been used in vertical cast-in-place construction.

More information about plastic and rubber form liners can be obtained from the Portland Cement Association, General Office, 33 West Grand Avenue, Chicago 10, Illinois.

## NCMA Booklet on Split Block for Promotion Use

"Split Block Architecture" is a new 12-page promotion booklet which has been published by the National Concrete Masonry Association. It is designed to explain how this distinctive block is made and to show its use in exterior and interior design. Photographs show split block installed in residences, commercial, and industrial buildings.

This publication can be used by companies to promote the use of split block. Information is available from the National Concrete Masonry Association, 38 South Dearborn Street, Chicago 3, Illinois.

■

## Seminar on Autoclaving Held in Toledo, Ohio

National Cement Products Company, Toledo, Ohio, sponsored a seminar to acquaint architects and engineers of Toledo and northwestern Ohio with the latest information on autoclaved concrete units. The seminar took place October 7, with Edwin L. Saxer, professor and head of the department of civil engineering at the University of Toledo, as speaker.

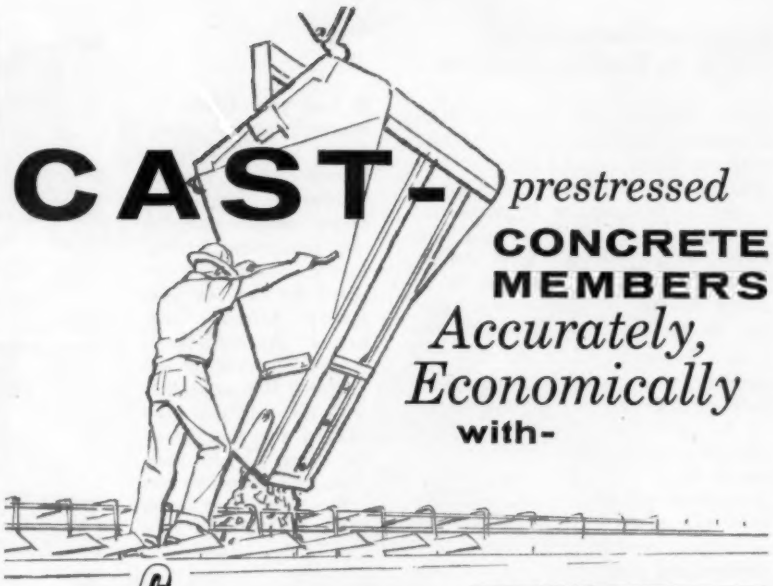
■

## Cement Production

Production of finished portland cement in August 1957, as reported to the Bureau of Mines, U. S. Department of the Interior, totaled 31,406,000 barrels, an increase of four per cent over August 1956. Production in August last year reached 30,055,000 barrels. Total production during the 12 months ending August 31, 1957, was 297,388,000 barrels.

Figures based on the reports of 161 plants in 37 states and Puerto Rico show that mill shipments in August 1957 totaled 35,365,000 barrels, up 6 per cent compared to 33,324,000 barrels in August last year.

Mill stocks of 20,019,000 barrels of finished portland cement were on hand August 31, 1957, an increase of 17 per cent over the 17,068,000 barrels on hand at the end of August, 1956.

CAST- *prestressed* CONCRETE MEMBERS *Accurately, Economically* with-

FORM-CRETE

STEEL FORMS

**DESIGNED FOR USE** on a flat casting bed, Form-Crete all steel forms are engineered to produce the highest quality smooth finish, prestressed and precast products. Carefully engineered product release angles permit easy stripping of cast product and heavy-gauge steel construction provides an indefinite form life. What's more, many Form-Crete forms can be quickly adapted to produce a variety of products keeping form investment costs low, output high.

Get into the profitable prestressed concrete business now with accurate, economical Form-Crete steel casting forms. A newly revised catalog is yours for the asking. Write for your copy today.

Widely recommended and used throughout the building industry, prestressed concrete helps speed construction, provides unusual design features and materially reduces building costs.

Low initial cost, immediate availability and minimum maintenance give impetus to the use of prestressed pilings and beams in the nation's bridge building program.

*Send for Catalog 300*

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

LAKELAND, FLORIDA • RIVERSIDE, CALIFORNIA

Please send me a copy of your new Catalog No. 300.

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## Provides Checklist for Guide in Human Relations

The National Association of Manufacturers has published a booklet, "Human Relations and Efficient Production," for executive management to use as a yardstick in measuring its industrial relations practices. Questions in checklist form emphasize that efficient production is directly related to "employee satisfaction on the job."

The foreword points out that "no company can operate at maximum efficiency if the dignity and self-respect of the individual employees are not carefully safeguarded." Some of the areas dealt with are management's policy-making role, employee selection and placement, equitable compensation, seniority, grievance procedure, and plant rules and discipline communication with employees.

The booklet may be obtained for $.25 per copy from the National Association of Manufacturers, Industrial Relations Division, 2 East 48th Street, New York 17, New York.

■

## Plans for ACI Meeting in February Are Completed

The annual convention of the American Concrete Institute will be held *February* 24-27, 1957, at the Morrison Hotel, Chicago, Illinois. This 54th meeting of the Institute will enjoin various discussions on the technical aspects of concrete and concrete construction, according to A. Allan Bates, vice-president of the Portland Cement Association and general chairman of the Chicago convention committee.

The first day, Monday, will be devoted to "working sessions" of technical committees. Tuesday's features will be two general sessions, one on proposed ACI Standards, the other on the construction of the St. Lawrence Seaway.

On Wednesday, concurrent sessions on fatigue of concrete, concrete construction, structural design, and the design and construction of highway pavements will take place. The annual research session will headline the activities on Thursday with a tour of the Portland Cement Association laboratories topping off the day.

● New twists in highway advertising, such as is found on McAdoo's painted bulletin outside Union City, Tennessee, capture a driver's attention, provoke him to laughter, and give him something to remember.

● Last year Edwin O. Harwell, safety director of Stewart & Nuss, Incorporated, Fresno, California, hung the safety plaque won by the company in the safety contest sponsored by the National Ready Mixed Concrete Association. Again this year he will perform this operation with the safety plaque reward for first place in Class C competition. The company has taken first place in its class in the last four out of five years.

■

## He Received a Bumpy Up-and-Down Ride

This very humorous, and yet sad, story, which first appeared in the *Manchester Guardian*, has been published a number of times in the various news outlets in the U. S. Even so, we think it is worthwhile repeating for those who may have missed it:

The letter from a bricklayer in Barbados to his contracting firm reads: "Respected sir, when I got to the building, I found that the hurricane had knocked some bricks off the top. So I rigged up a beam with a pulley at the top of the building and hoisted up a couple of barrels full of bricks. When I had fixed the building, there was a lot of bricks left over.

"I hoisted the barrel back up again and secured the line at the bottom, and then went up and filled the barrel with extra bricks. Then I went to the bottom and cast off the line.

"Unfortunately, the barrel of bricks was heavier than I was, and before I knew what was happening the barrel started down, jerking me off the ground. I decided to hang on and half-way up I met the barrel coming down and received a severe blow on the shoulder.

"I then continued to the top, banging my head against the beam and getting my finger jammed in the pulley. When the barrel hit the ground it burst its bottom, allowing all the bricks to spill out.

"I was now heavier than the barrel and so started down again at high speed. Halfway down, I met the barrel coming up and received severe injuries to my shins. When I hit the ground I landed on the bricks, getting several painful cuts from the sharp edges.

"At this point, I must have lost my presence of mind, because I let go the line. The barrel then came down, giving me another heavy blow on the head and putting me in the hospital.

"I respectfully request sick leave."

# Storybook Characters Become Real for Retarded Children

By MOANA B. BENNETT

● Up, Up goes Jack's Beanstalk.

CONCRETE has been used many times to build technical wonders but perhaps never before in such a unique project as a playground at American Fork, Utah, where skilled building craftsmen are volunteering their labor for a project of helping others.

Here, on six and one-half acres located atop a peaceful plateau overlooking Utah Lake and nestled at the foot of Mount Timpanogas, these men, recruited mostly from the nearby Geneva Works of U. S. Steel, are building a park of giant storybook characters for the pleasure of children who will never grow up. The park will be part of the facilities of the Utah State Training School for the mentally retarded. It began as the dream of Dr. Vernon F. Houston, the superintendent of the school, and progressed into actuality when he interested a few practical steelmakers and builders in the project.

● Pied Piper sounds his notes above the heads of the playing children.

This half-million dollar project is being financed mostly through donations. The state allowed $20,000 for the initial purchase of building materials. Donations of money have come from clubs and individuals, but the biggest boost has come from volunteer labor and donations of building materials, either in whole or in part, by local suppliers.

For instance, ready-mix concrete is being provided at a discount. At present, in the second year of a projected five-year building schedule, more than 200 yards of concrete have been poured, supplied mostly by Thorn's Construction Company of Provo, Utah, with a few loads from Warburton's Ready-Mix at American Fork. Another company is allowing discount on fibre-glass purchases and one supplier donated all the electrical conduit cable needed to wire the figures for talking.

All of the giant storyland figures are planted firmly in place by giant blocks of concrete; the Pied Piper of Hamelin, who stands 18 feet tall at the playground entrance, is anchored by 13 cubic yards of concrete. An additional slab of eight cubic yards of concrete, poured beneath his feet, acts as a pathway by which visitors will enter. The famous "Piper of Children" is one of more than 36 giant figures being built at the park.

Each character is shaped by steel frame, covered with small rods and fine wire mesh, which in turn is covered with burlap. A coat of plaster is added, and finally the figure is covered with color impregnated fibre glass to make it weather resistant.

Besides the Piper, Jack's Beanstalk, reaching 60 feet into the air, Peter-Peter's Pumpkin Shell, the Toonerville Trolley, 2500 feet of track, and the railroad station house, and rest rooms have been completed. Goosey-Goosey Gander Castle and the Little Red School House are both under construction. Concrete floors already have been poured for the pie that held "four and twenty blackbirds" (it is to be a cage for live blackbirds) and for the House of the Three Bears.

Concrete is also being used in the stream and lake beds throughout the park. Re-enforcing bar is laid first and then the concrete is poured. While the concrete is still wet the surface is sprayed with water, sand, and cement from a machine borrowed from the steel plant. During the spring, summer, and fall, water will be circulated through the streams and lakes. In the winter it is planned to let the water freeze in some of the lake beds in order to teach as many of the children as possible how to ice-skate.

Over the years concrete has held many structures in place, but it is doubtful if it will ever anchor objects bringing greater happiness to less fortunate people than these giant figures of childhood's most pleasant friends in a park for children who can not grow up.

● Harrie Clegg, president of the Crume Brick Co., Dayton, Ohio.

# Cement Slurry Builds Stronger Block

***Mr. Clegg's speech to the Southeastern Concrete Masonry Association describes the making of cement slurry with the Cowles Dissolver.***

This is a discussion of a new method of preparation of cementitious slurries for use in the manufacture of concrete and concrete masonry units. This method has been developed by the Pine Corporation of Cincinnati, Ohio, with the cooperation of the Crume Brick Company of Dayton, Ohio.

It is based upon the use of the patented Cowles Dissolver, a mechanical dispersing device in wide use in the chemical paint and ceramics industries.

This process has been under development for over five years, in the laboratory and with full size production on masonry units.

Hundreds of tests of all kinds have been conducted on cubes, brickettes, bulk concrete cylinders, masonry units and concrete pipe.

It should be noted here that this processing equipment is not intended to replace present mixing equipment.

It is designed and intended to be an addition to existing equipment and to fit the new equipment to the old. The new equipment is concerned only with the preparation of the cement or cementitious material or materials being used as a binding agent in the concrete.

From the beginning of the investigation, which has led to the development of this process, it was evident that the concern should be with the binding agent: that is cement or cement in combination with other suitable materials, such as silica flour, flyash, or chemical additives.

Because the binding agent is the most expensive ingredient of the concrete, it should be treated in such a manner as to develop its fullest value and best qualities. The Cowles Dissolver referred to is a high speed dispersion machine employing a disc type vaned impeller. To most effectively utilize the capabilities of the dissolver, it is desirable to work on the cementitious elements and water only.

Cement, as manufactured, consists of very fine particles. These readily agglomerate, and the function of dispersion is to b r e a k the "clumps" to individually wetted particles.

Thus, the Cowles Dissolver by dispersing the cement at high speed allows the maximum surface area to be exposed to the water of the batch. This establishes the most favorable conditions for the hydration of the cement.

To those who use cement in the manufacture of concrete products, the qualities of the end product are of paramount interest. Some of these qualities are strength, density and stability. Strength and stability are the characteristics that are altered by the use of cement slurried under the Pine process. The well dispersed cement, as delivered to the main batch, imparts greater strength to the end product since the ratio of hydrated to unhydrated cement is much higher. The same ratio is of utmost importance in determining stability as well, as test figures will show.

With this process, it is not only possible, but advisable, to reduce the cement content of the concrete used in many products. With the Pine process we will see that strengths in excess of those normally obtained are possible with less cement in the batch. It is generally accepted that less cement in a concrete will result in greater stability. Under this method, we not only reduce the cement

content but provide for its greater stability. Under this method, we not only reduce the cement content but provide for its greater reaction with water, which gives a two pronged attack on the problem of stability.

Not only does the use of the Pine process improve the end product but also aids in the "In Plant" handling of materials.

Greater plasticity, developed by this process, improves the feeding characteristics of the average block machine and results in a material reduction of culls. In some plants the use of this slurry process can result in a cleaner and more dust free operation.

There is an interesting side effect gained by the use of slurried cement. Tests on neat cement cubes dispersed and undispersed and cured under ideal conditions indicate higher early strengths for the dispersed slurry. This effect has also been noted in bulk concrete cylinders and masonry units.

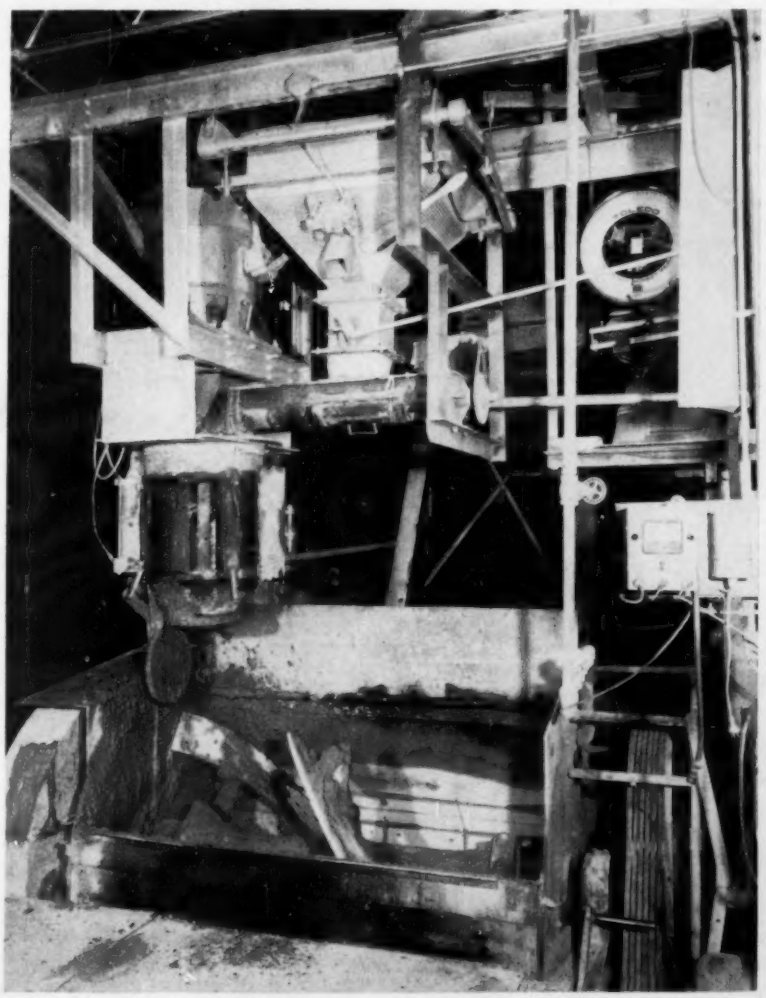
The dispersed cement binder has the ability to flow and coat the aggregate, but the slurry is not intended to be used as a void filling material. It is necessary, then, to maintain a proper balance of size gradation in the aggregates. It has been our practice to follow the gradation curve suggested by the NCMA and to stay within its limits particularly in regard to fines. It is also important that the aggregates be sufficiently dry to allow for the dispersion water and also for a small amount of water to be added to the big mixer. This small addition of water is to control the final texture of the block. The unit is automatic and the whole series of events starts with the programmer sequence. Following is an outline of the various operations carried out during one cycle of the slurry preparation:—

**Start:** programmer opens an electrical solenoid valve to put the mixing water into a hold tank. This valve is closed by an adjustable electric float switch. After the proper quantity of water, always constant for any given water/ cement ratio or batch size, is in the water supply tank, the programmer starts a pump which pumps the mixing water into the disperser tank through a manifold equipped with spray nozzles at the top of the tank. This mixing water rinses off the tank wall as it enters. It thus serves two purposes. After the mixing water is in the tank, the programmer shuts off the pump. It then starts the motor of the disperser and the motor of the cement conveyer at the same time, the cement having been previously weighed into the scale hopper.

After the cement has been transferred to the dispersing tank by the conveyor, the programmer shuts off the conveyor. Meanwhile the dispersion unit continues to operate. After a fixed time the programmer starts the water pump again pumping in a second charge, which is the "let down." This second addition supplies the final amount of water needed for the proper balance in the batch. Finally the programmer opens the tank bottom and the dispersion is dropped into the large mixer with the aggregates. The programmer then closes down the complete dispersion unit. The dispersing time is ordinarily about four to five minutes in total duration. Thus it is possible to disperse one batch while the previous batch is being blended into the aggregates in the conventional mixer.

To summarize very briefly, the application of the principals of efficient dispersion to the problem of cement treatment improves the end products, aids in manufacturing and reduces costs.

In comparative compressive-strength tests on two groups of autoclave-cured block—one group using the slurry and the other mixed in the usual manner—the slurry group had an average strength some 20 per cent higher than the other group. The three block using the dispersed cement from the Cowles Dissolver had strengths of 1654, 1721, and 1343 psi—an average of 1573 psi. Their counterpart in the tests—the group of three block mixed normally —had strengths of 1406, 1372, and 1444 psi for an average of 1407 psi.



● Disc-type vaned impeller, on a Cowles Dissolver (left, above the mixer) disperses cement at high speed to make a slurry of cement and water. This mixture is then dropped into the mixer with the aggregates.

● Crew place block in rows along top of truss. Ducts for post tensioning are visible in precast end blocks.

# Prestressed, Arched Roof

***Post-tensioned bow string trusses of block, spanned between by six-inch pretensioned soffit block planks, make up this supermarket's roof.***

A method of prestressing concrete block so that they form an arch, or bow string roof truss, has been used in the construction of a supermarket at Alpena, Michigan.

The installation is said to be the first of its kind in the United States and possibly the world.

Eight trusses, each weighing approximately 20 tons, span the 100 by 150-foot concrete-masonry structure. They are 100 feet long and can support a live load of 40 psf. Design is effected by special shaped soffit block featuring cast channels in which steel wires are threaded.

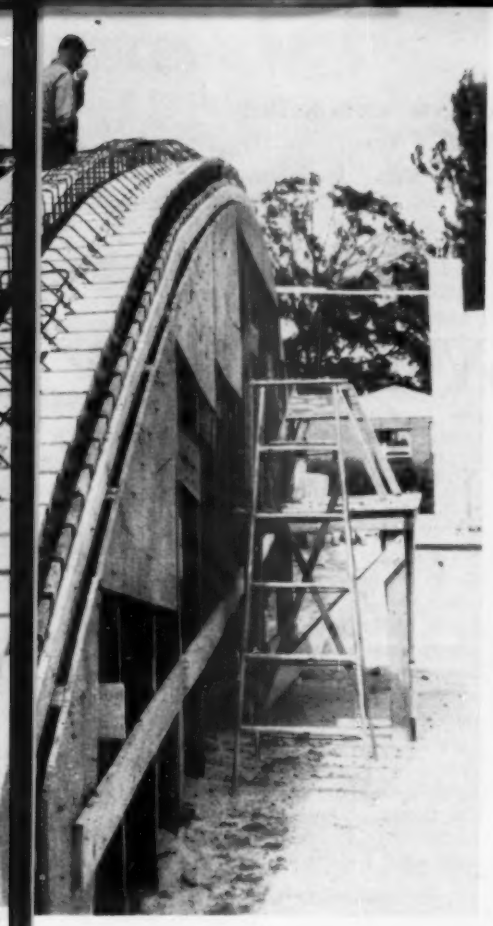
Hoisted into position by crane, the trusses are spaced 18 ft., 8 in. apart. Every other truss has an arch of about 13 feet; alternate trusses rise around 11 feet. This technique gives the roof a folded shell appearance as well as a resistance to heavy snow fall indigenous to that area.

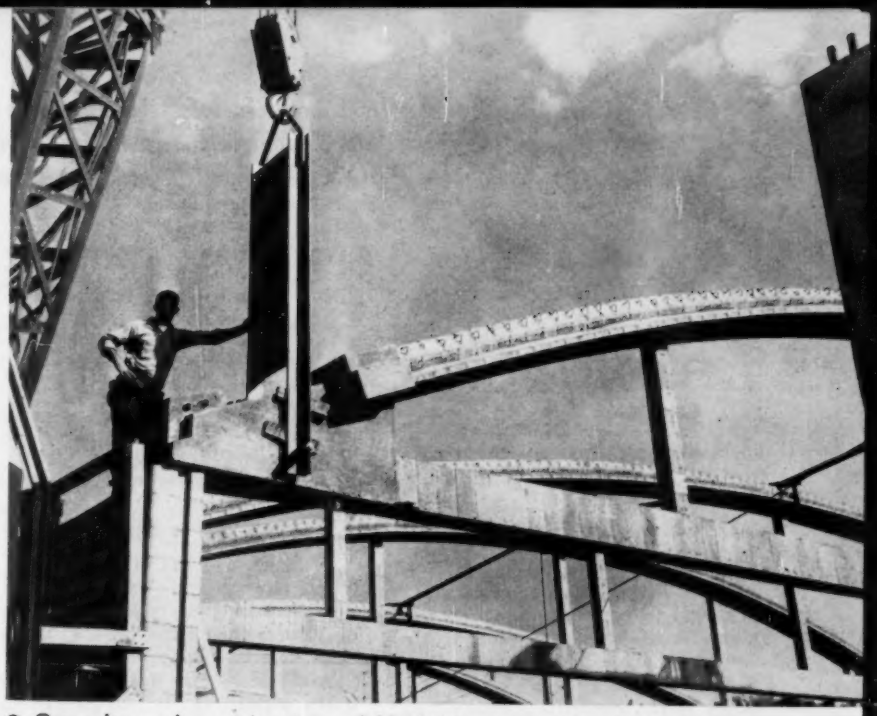
All fabrication took place right at the job site. The straight tension tie, or bottom chord, of the truss is composed of U-shaped lintel block (12 by 16 in.) filled entirely with grout. Post-tensioning is provided for by four flexible tubes, each of which encases 10 prestressing wires.

Assembly of the bow, or top chord, consists of laying two rows of 8-inch high hollow soffit block side-by-side on previously built light scaffolding. A single row of 6-inch high units is then placed atop the double row. Here again, prestressing wires are inserted in the special grooves.

Both chords are subsequently post-tensioned and grouted. Anchorage is supplied by precast reinforced concrete end blocks. All prestressing wire (¼ in. diameter) is cold-drawn steel, with an ultimate strength of 240,000 psi.

Vertical hanger posts (five per truss) support the bottom chord. They are made up of 8 by 8 inch units, filled with grout, and two mild





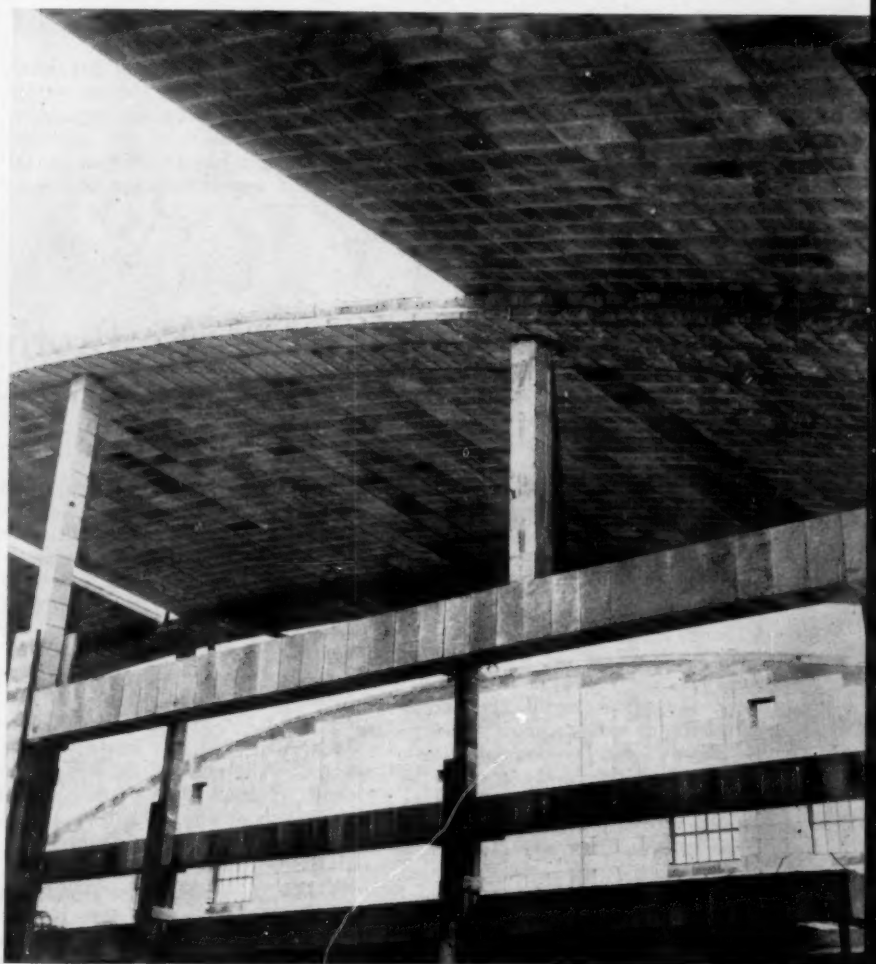
● Crane lowers bow string truss of block into place atop pilaster.

# of Block

steel bars. Roof area between trusses is built of 6-inch pretensioned soffit block planks. All told, there are approximately 25,000 concrete block in the roof.

The concrete masonry bow string truss was designed by the Prestressing Research and Development Corp. of San Antonio, Texas. Architect for the Kroger supermarket is A. Charles Jones of Flint, Michigan. Elasticrete Construction Corp., serves as general contractor.

Engineers and developers of the system point out that trusses built of hollow masonry block are 50 per cent lighter than conventional solid prestressed girders. Block's fireproof qualities are likewise cited together with the fact that such construction will not collapse under heat. Cost is held comparable to both wood and steel systems.



● Pretensioned soffit block planks span roof between the trusses.

**Editor's Note:** ***We believe this NLRB decision against compelling employees to join an unwanted union is important. Therefore, we are printing the NRMCA's letter and summary of this decision.***

# Employees Object: Don't Want Union

**Oregon Producer and Teamsters Union Are Jointly Found Guilty of Unfair Labor Practice Charge by Compelling Employees to Join Union**

To Member Companies:
Gentlemen:

1. Attached is a memorandum prepared by association counsel which summarizes a decision of the National Labor Relations Board that an Oregon sand and gravel and ready mixed concrete producer had, in concert with the Teamsters union, been guilty of an unfair labor practice. The company faced a problem which is not unfamiliar to many producers: organizational picketing and secondary boycotts by the union to compel the company to compel its employees to join the union if the company was going to stay alive. After finding that the union had the naked power to prevent it from doing business, the company signed a so-called agreement with the Teamsters union which required all employees to become members of the union within 30 days, to pay an initiation fee of $40 plus dues of $5 a month, and to make substantial payments to Teamsters pension plan and welfare funds.

2. The employees had previously voted against joining the union. The company apparently did not anticipate the rebellion of its employees against capitulation to the union. Mr. Horsky's memorandum traces what happened at that stage and what the NLRB decided.

3. This is an important decision for our industry. Its significance and value should be the subject of careful study. It ties in quite appropriately with the decision of the Supreme Court of the United States in a Wisconsin case in which an injunction against organizational picketing of a gravel operation was sustained (see our report to member companies on July 3, 1957). The decisions of the Board and the Supreme Court in these cases give us reason to hope that the power of unions will be sharply curtailed in the future, even without additional legislation.

Sincerely yours,
Vincent P. Ahearn
Executive Secretary

# Morse Brothers Decision by the National Labor Relations Board

On September 10, 1957, the National Labor Relations Board decided a case which should be of interest to our members not only because the employer involved was a company dealing in sand and gravel and ready mixed concrete, but also because of the nature of the illegal acts charged and found. The case is *Morse Brothers, et al.* and *Teamsters Local Union No.* 324, 118 NLRB No. 172.

The facts were not in substantial dispute. The company had a number of truck drivers, only two of whom were members of the union. These two had been employed in 1948 because the union would not permit deliveries of ready mixed concrete to union jobs by non-union employees. In 1956, however, after the company had secured a contract to supply ready mixed concrete to a large construction project and had begun deliveries, the union informed the prime contractor that the company could not be used because it was non-union. When deliveries by the company continued, the job was picketed and all work on it stopped.

Executives of the company, in a conference with union representatives, sought to interest the union in trying to organize the company's truck drivers, and stated their willingness to recognize the union if it became the representative of the majority of the company's drivers. The union representative stated that the union had tried that in the past, but without success, and was not interested in trying it again. Shortly thereafter, faced with the loss of the supply contract, the company signed a union shop contract with the union. The pickets were immediately withdrawn.

Under the contract, the company's employees were required to become members of the union within thirty days (at an initiation fee of $40 plus dues of $5 per month), and to make substantial payments to the Teamsters pension plan and the Teamsters welfare fund. The employees, despite urging by the company representatives, refused to accept the obligations of the contract, and filed with the National Labor Relations Board charges of unfair labor practices against both the company and the union.

The trial examiner fully sustained the employees, and held that the company and the union had each engaged in unfair labor practices. The trial examiner said:

"It is undisputed that prior to September 7, 1956, the union did not represent a majority of the employees of the company in an appropriate unit for collective bargaining. Nevertheless, on that date the union initiated picketing on the

Shields job site for the purpose of forcing the company to assist it, in forcing the company's employees to join the union. This plan or scheme of the union was in direct violation of the employees' rights, as guaranteed in Section 7 of the Act. It is clear that Morse Brothers was not at first a willing partner of the union, but when faced with the economic pressure placed upon it by the union, through Shields, Morse Brothers surrendered, and thereafter was an active participant in the illegal enterprise."

The motive of the union, the trial examiner stated, was a financial one. "It placed its picket on the Shields job (the construction project) for the purpose of coercing Morse Brothers to assist it in fastening on each employee of the company an undesired membership . . . . and the additional contractual obligation to pay the union" a large sum annually. "The amount of money here involved explains the lack of interest of the union representatives in talking to the men. If the company took the money from their pay, the employees could be disregarded entirely."

The Board approved the decision of its trial examiner, and ordered the union and the company to cease giving effect to the contract.

Although the case reflects a particularly flagrant disregard of employee rights it is not unique in holding both the employer and the union guilty of a violation of the Act. In a recent speech, National Labor Relations Board Chairman Boyd Leedom referred to other cases "where a company and a union, in agreement, undertook a program 'to deprive the company's employees of their statutory freedom to choose or reject any union, and to coerce them into accepting . . . a Teamsters local as their bargaining agent.' " He referred specifically to the recent decision in *Max Factor & Co.*, 118 NLRB No. 97. See also *John B. Shriver Co.*, 103 NLRB 23. Chairman Leedom commented that these decisions demonstrate "an employer's willful disregard of law, a proneness to buy economic protection from a union which likewise disregards laws and a cynical management attitude toward the desires and well being of its employees."

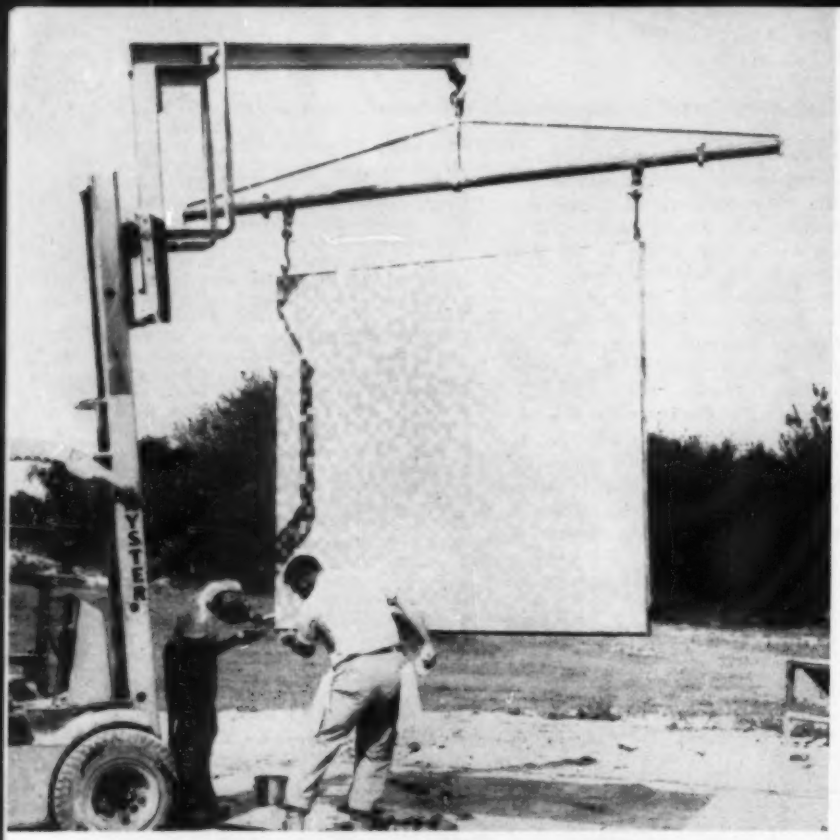
It should be noted that the Board is, at the present time, reconsidering its prior decisions dealing with so-called "organizational" strikes, in which a union seeks, as in the cases just discussed, to compel an employer to coerce his employees into a union. Until now, the Board has not found union conduct of this sort to be an unfair labor practice, largely because picketing has been considered as within the constitutional protection accorded free speech, and strikes within the saving clause in the Act referring to the "right to strike." Recently, however, the general counsel of the Board, in a series of cases, has challenged the current view. ✤ The trial examiners in these several cases have come to varying conclusions, and all of the cases are now before the Board awaiting decision. If the Board decides that such picketing or strikes are illegal, there may be an avenue of escape for an employer faced with illegal demands by a ruthless union.

✤ *In the order in which the intermediate reports were issued: International Union of Operating Engineers, Local Union No. 12, AFL-CIO (Shepherd Machinery Company), Case Nos. 21-CB-805 and 21-CC-229 recommending finding 8 (b) (1) (A); Drivers, Chauffeurs and Helpers Local 639, International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America, AFL-CIO (Curtis Brothers, Inc.), Case No. 5-CB-190 (recommending finding no violation of 8 (b) (1) (A); International Association of Machinists, Lodge 942, AFL-CIO (Alloy Manufacuring Company), Case No. 19-CB-430 (recommending finding 8 (b) (1) (A) and 9 (b) (2); International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America, AFL-CIO; Merchandise Drivers Local 641, IBT, AFL-CIO; Local 506, IBT, AFL-CIO, its acting president, Walter Adams, its business agent, James Snyder, and its international trustee, Rocco F. De Perno, etal. (Ruffalo's Trucking Service, Inc.), Case Nos. 2-CC-379, 2-CC-384, 2-CB-384, 2-CB-1720 and 2-CB-1763 (Post 3-CB-367) (recommending finding no violation of 8 (b) (1) (A) or violations of 8 (b) (4) (A) and (B); Paint, Varnish & Lacquer Makers Union, Local 1232, AFL-CIO and Steel Paperhouse, Chemical Drivers & Helpers Local 578, International Brotherhood of Teamsters, Chauffeurs, Warehousemen & Helpers of America, AFL-CIO, (Andrew Brown Company), Case No. 21-CB-830 (recommending finding 8 (b) (1) (A); and Joint Council of Sportswear Cotton Garment, Undergarment & Accessory Workers Union, AFL-CIO (Mrs. Edwin Selvin, Labor Relations Consultant), Case No. 21-CB-864 (recommending finding 8 (b) (1) (A).*

● "It's that concrete fella. Insists our gold streets are too soft and impractical . . . that concrete is much better."

# They

# Concrete



● A mosaic pattern dots the exterior side of a wall panel precast by Tecfab, Inc., of Beltsville, Maryland.

Taking its place among the vast array of precast concrete products is a newly-developed, quickly-erected, lightweight wall panel that is factory designed for structural loads.

A typical panel consists of a 5/8-inch-thick, dense-concrete outer layer—usually with the aggregate exposed on the surface. Back of this is a 3½-inch-thick slab of perlite concrete that has running through its center a corrugated and punched pressed-steel core. Both sides of the core are covered with woven wire netting. Thus, the total thickness of each panel is very close to 4 inches.

A welded, pressed-steel frame encases the perimeter of each panel.

Tecfab, Incorporated, Beltsville, Maryland, producers of these concrete wall panels, was established in 1954—after they had completed a 10-year program of research and tests towards perfecting the precast panels before placing them on the market.

First production from the factory came off the line in October, 1956; and since then Tecfab's panel-wall systems have been used on buildings along the east coast from New York to Virginia. Costs of these structures, some of which are now completed, range from $300,000 to $1.4 million. Tecfab now has its eye on a project with an estimated cost of $15 million.

Flexibility of the panels' sizes and shapes makes them adaptable to any modular construction system; the framework of the building controls the panel's dimensions. So far they have varied in size from 8 x 8 feet and 4 x 14 feet (sizes used on the Tecfab office and factory) on up to 8 x 20 feet, the largest panel made so far. And Tecfab believes still larger panels than this can be made without exceeding the range of economical precast production and distribution from the plant.

Finished panels weigh between 17 and 20 lbs. per square foot. Actual weight of each panel depends upon the ratio of the perimeter to area and the load to be sustained, since these factors determine the gauge of the steel used in the core (from 16 to 20).

In tests, finished 8-foot-high panels withstood 10,000 lbs. per linear foot in compression. Panels spanning 8 feet and 10 feet 6 inches were tested in transverse loading and carried uniformly distributed loads of 375 lbs. per square foot and 200 lbs. per square foot respectively without evidencing any failure.

The city of Baltimore building inspection department tentatively has approved a two-hour fire rating for Tecfab construction predicated on results from a panel tested by A. S. T. M. method E 119-55, but for panel dimensions. The exterior surface reached the limiting temperature after 2 hours and 54 minutes of exposure of the interior face with no visible sign of failure of the dense concrete exterior aggregate which was not exposed to flame of torches. To establish a firm rating, tests are to be resumed on a 10 x 10-foot panel that will comply with stipulations of the A. S. T. M. test method.

Supported by investigation and interpolations of reports of the Perlite Institute, the coefficient of heat transference of the panels is U=.19.

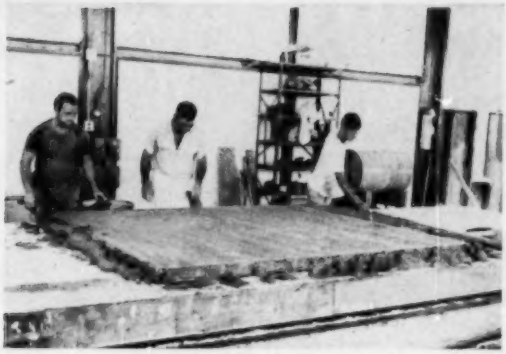
Two panels, intervening joint caulked with a synthetic base compound comparable to that now used in practice, were tested for weatherproofness. Exterior concrete aggregate was subjected to 10, 24-hour weather cycles. The laboratory reported that at no time during the test did moisture appear on the interior surface.

When a panel leaves the casting table it is a complete, ready-to-erect unit finished inside and out. Natural smooth white interior surfaces require no further treatment; or they can be painted, sheathed or panelled as desired. Also, the walls will support brads, nails, and screws without danger of cracking.

Exposed exterior concrete aggregate surfaces feature almost any color and texture: ceramic, mosaic and a variety of pigmented effects and

By ORNAN B. SMART

# Produce Precast Wall Panels



● Two concrete mixes are required to cast the wall panels. Concrete for the exterior side, chosen for color and texture, is cast to a 5/8-inch thickness. Then the interior surface is cast on top, using a perlite concrete, and given a smooth finish.

techniques for contrast and emphasis. Or panels can be joined to show an uninterrupted masonry surface.

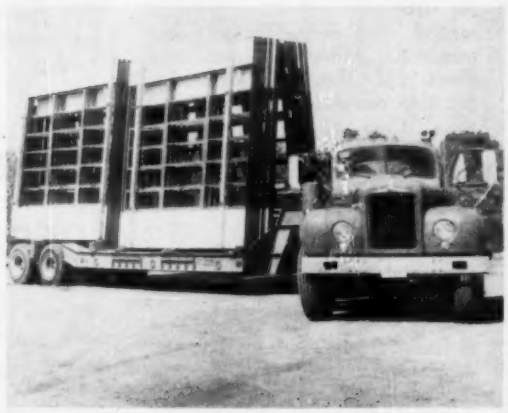
Some designers accentuate construction joints as an architectural motif to relieve the monotony of a bare unadorned wall. Standard shop practice is to use a channel section for panel frames. Other shapes can be pressed when the panels are fabricated if more adaptable to the exterior treatment.

When fabricating window-wall panels—panels that contain openings (windows, doors)—frames for sash, display glass, or jambs for doors are positioned in the panel frames to become embedded in concrete when the slab is poured.

When specified, assembled doors and windows are delivered to the factory for installation to simplify and expedite enclosure of the structure.

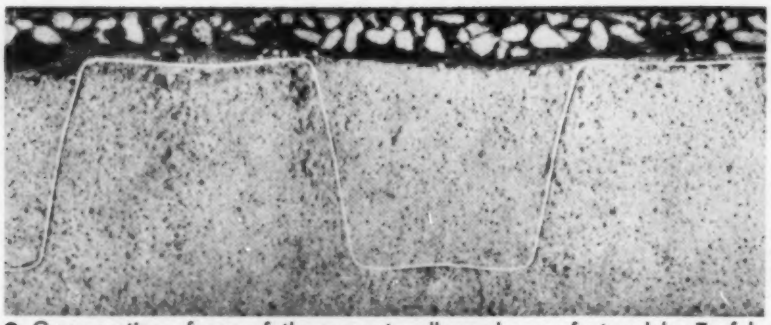
Established Manufacturing Methods of Fabricating a Typical Wall System Are:

1. Basic Engineering: Structural design of panel wall sections in coordination with that of the building.
2. Preparation of Shop Drawings: Show working details . . . panel dimensions . . . joining units . . . fastenings to framing structure . . . all components and accessories.
3. Submit Shop Drawings to Architect or Purchaser: Panels are not fabricated until these and sample panels of exterior treatment are approved. Compounding concrete facing is controlled by approved sample.



● A trailer-truck transports window-wall panels from the Tecfab plant to the construction site. No other transportation is used by the company. The panels are complete, finished on both sides, and ready to erect when they come off the casting beds.

● A three-man erection crew places the window-wall panel of the Thomas Addison Elementary School building at Oxon, Maryland. Clips welded to the framing of the structure guide the placement of the panels. Construction of these wall panels can continue through bad weather.



● Cross section of one of the precast wall panels manufactured by Tecfab, Inc., shows the two layers of concrete and the reinforcing used in the units. The top 5/8-inch layer of exposed aggregate concrete will be the exterior side.

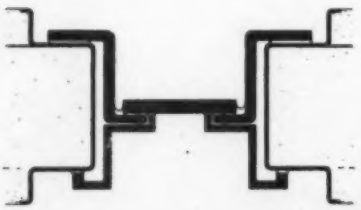
4. Fabrication of Pressed Steel Core Parts: Coil steel 48" wide sheared to predetermined working length . . . gang-punch patterns steel sheet with perforations adequate for free passage of concrete to embed core assembly to insure maximum bond . . . perforated sheet fed through corrugating press to complete the operation.
5. Core Assembly: Adjoining sections butt-welded until a core has been assembled and welded to fulfil over-all dimensional requirements. Woven wire netting is stretched across both corrugated faces and spot-welded.
6. Casting the Panel: 5/8" exterior aggregate is poured into steel panel frame on the casting table . . . core set in position . . . perlite concrete poured . . . vibrated until mix is dense, uniformly distributed and all panel components are securely bonded . . . upper perlite surface (interior exposed panel face), screeded and levelled to a smooth finish.

Transportation of the panels from the Tecfab plant to the job is entirely by trailer-truck. Once delivered, the walls go up fast with a 3-man erection crew, truck mounted crane and an operator. Structures are prepared in advance of panel installation by a welding crew attaching clips to the framing of the building.

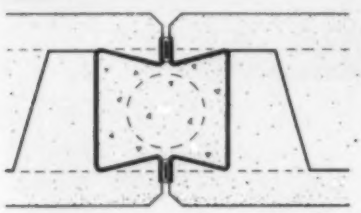
Intervening joints in wall spans are caulked until watertight with synthetic rubber-base caulking compound.

The walls of the Thomas Addison School, Oxon, Md., were erected in 13 hours including factory-installed windows. Fastenings were welded to framework by 2 men in 8 hours.

Construction began some 6 months ago and was finished last month. In this area, the cycle for such a school would average 12 months. Window-walls contributed to hastening completion by enclosing the structure, so: whether it rained, snowed, or froze, work went on, cutting down on the cost of labor throughout the building.



A typical section joining two panels for an expressed structure exterior.



A typical section joining two panels for an all masonry exterior.

# What to Do About the New Income Tax Requirements

Gross income, including an itemized report of all reimbursed expenses (travel, meals, lodging, entertainment, etc.), must be reported on individual income tax returns for 1958 (not 1957 as announced).

At the taxpayer's option, he may submit a memorandum explaining expenses in full, or he may use a prepared worksheet, form 2106, available from offices of the Internal Revenue Service. The worksheet has been prepared to aid taxpayer in listing expenses for which he was reimbursed by his employer, and for which he may claim a deduction. If used, this worksheet must be attached to form 1040 when it is returned to the Internal Revenue Service.

In view of the above ruling, and the detailed reports that will be required from employees, counsel for the National Ready Mixed Concrete Association has recommended the following actions be taken by employers:

1. Inform employees of the Service policy and the necessity for keeping adequate records.
2. Retain expense account records submitted by salesmen and other employees for several years in case such records are needed to support the deductions. Frequently an employee will prepare only one copy of such forms and submit that copy to the company. Employees should be advised to retain, in the future, a copy of such records.
2. So far as possible, avoid cash reimbursements which must be reported and explained by the employee. For example, many expenses can be paid directly by the employer through the use of travel cards and similar arrangements for hotel and automobile expenses. The employee may not have a record-keeping system adequate to account for such expenditures, and showing a large amount of reimbursed expense on his Form 1040 may result in audit of the return.
4. Review with your attorneys or tax advisors the type of information which is required to support expense deductions upon audit of returns. If possible, incorporate these items in the company's standard expense account forms, so that the evidence will be readily available if necessary. In the case of employees who do not file a detailed expense account, a diary complying with the requirements of Rev. Rul. 54-497, as quoted above, is advisable.

# S. E. Block Producers Meet at Memphis

● Tennessee's Governor Frank Clement (left) stands with Southeastern's President Katterjohn just prior to Monday's luncheon at which Clement received a standing ovation from the more than 200 producers and guests.

Quite a number of prominent producer members of the Southeastern Concrete Masonry Association were kidded and ribbed in song during the convention banquet at Memphis' Claridge Hotel.

Of course, George Katterjohn, president of the association, which held its annual meeting, November 3-5, was one of those whose name was added to the long list of concrete men who done wrong. Joining Mr. Katterjohn on the receiving end of the verses by three pretty songstresses were men like Dale Cobb, Jackson Ready-Mix Concrete Company, Jackson, Miss.; Jim Fountain, Dodds & Fountain Co., Greggton, Texas; and Forest Ladd, John A. Denie's Sons Co., Memphis, Tenn. The ribbing was all in fun, though, as was the spirit of all three evenings of the convention.

The days of the convention, of course, were taken up by well-attended meetings.

**Business Volume** • A not-too-cheery subject took up a portion of Monday morning's session. President Katterjohn, Katterjohn Concrete Products Co., Paducah, Ky., asked some of the producers across the country how business was holding up in their area this year.

A majority of the producers questioned, as expected, said that their sales were off. But Florida and southern California were mentioned as two of the areas where the volume of sales was going along at a level equal to or better than last year; though, in southern California the price was down about $.02 per 8x8x16-inch unit.

Throughout the balance of the country, except in localized areas of boom construction—such as Huntsville, Ala., with its Redstone Arsenal—total volume was off. The figures quoted varied from a decrease of approximately 10 per cent in Baltimore to as much as 40 and 50 per cent in other parts of the country.

A few of the producers who said their sales were down also mentioned that they were in the midst of fighting a price war, which was further eating into their profits.

One encouraging note, voiced by a couple of producers while discussing business in their locales, was a recent noticeable upswing in buying that had developed in the last few months.

**Slurry Process**• An interesting discussion of the use of the Cowles Disolver for high-speed mixing of cement and water, prior to incorporation with aggregate, was given by Harrie Clegg, president of The Crume Brick Co., Dayton, Ohio. Crume Brick's block, made with a slurry, had an increased strength of approximately 20 per cent over block made with the same ingredients and curing procedures, but mixed in the usual fashion. (*For a thorough rundown of this cement-dispersion process, including results of tests, see the article "Cement Slurry Builds Stronger Block" in this issue of CONCRETE.*

In the question period following the talk, Mr. Clegg, when asked whether Crume Brick had found a reduction of cement was possible with this process, said that his company now was using only 282 lbs. per 50 cubic-foot mixing batch, whereas before they were using 350 lbs.

**Labor Relations**• John S. Montedonico, partner of the Memphis law firm that represents the ready mixed producers in the area, gave a

brief history of the law as it affects producers and, in theory, the unions. But he said, realistically, that some unions—particularly the Teamster—have abandoned the idea of going to the National Labor Relations Board to settle a dispute. Instead, they just put up a picket line around the plant, or, if this doesn't work, around the plants of a producer's customers. Mr. Montedonico mentioned that this form of coercion through secondary boycott was one of the abuses—in the no man's land of labor law—that may be corrected by legislation was here in the near future.

J. E. Kerwin

James E. Kerwin, director, Federal Housing Administration, Memphis, was quite emphatically optimistic about the future of the home building industry. He said that the U. S. will continue to need at least 1,000,000 new homes per year. And even this quantity of yearly building, if maintained for a period of years, would be less than adequate.

NCMA's president, Philip Paolella, and executive director, Walter Underwood, were the last two speakers on the program at Memphis.

A pencil and paper were needed during Mr. Paolella's talk on what he believed to be one of the larger problems facing the block industry, as well as the average producer in his own locale—the relatively small amount of united and individual effort and money going into promotion, advertising, and research. According to Mr. Paolella, this lack is particularly pressing now in view of the fact that there are such giants—concentrated industries—ranged against the block producers.

Facing this group of few thousand relatively-small businesses are a number of corporations, any one of which is as big, or almost so, as the combined block industry. Mr. Paolella mentioned a few by name, Weyerhaeuser Timbers, Johns Manville, and United States Gypsum. And there are others, not mentioned by specific corporation name—steel, glass, plastics, etc.,—that would like, and are actively promoting, to take a larger and larger share of the market enjoyed by block.

An average figure for promotion and advertising of an industry's product, according to Mr. Paolella, is two per cent of gross sales. Using this as a guide, annual promotion of block should be in neighborhood of $8 million, based upon a total production of 2 billion units with a gross sales figure of $4 hundred million.

For his own state of Connecticut, which uses approximately 30 million block per year, Mr. Paolella reasoned that the local producers there should be spending $120,000 per year to promote block. This includes all forms—national and local associations, as well as advertising in the individual producer's market area. But Mr. Paolella was quite frank in saying he was certain less than one-half this amount was being spent now in Connecticut.

With outside competition going after the market as vigorously as it does, Mr. Paolella suggests that the alternatives are either unite and promote or, possibly, lose out.

Mr. Underwood explained NCMA's regional organization program (changed somewhat from the original plans printed in CONCRETE, September, 1957). Now, instead of five regions as previously stated, the country will be broken down into six groupings. The new region will comprise pretty much the states surrounding the Dakotas and Iowa. According to Mr. Underwood, the reasons for this new grouping involved geography, membership population,

● Phil Paolella and Walter Underwood relax after their talks

and the nature of construction in the area.

At the end of his talk, Mr. Underwood mentioned that the effectiveness of NCMA's new program was evidenced by the 37 new members that had joined since the regional organization program was announced.

Other speakers during the two-day meeting at Memphis' Claridge Hotel included: Thomas H. Naylor, Jr., executive secretary, Mississippi educational finance commission; Ernie Clay of the PCA's Atlanta office, who detailed wall costs of a Georgia builder; and Edward F. Thompson, vice president, Union Planters National Bank & Trust Co., Memphis.

# Summary

Businesses can fail even though they own things worth more than they owe. While this may seem strange, it is a fact. The reason is clear if you think it through: bills are paid with liquid funds, not with frozen assets. Running out of money needed to meet obligations when they become due can amount to bankruptcy.

The amount of working capital you need depends upon the type of business you're in. While rule-of-thumb ratios may be helpful as a starting point, a detailed projection of sources and uses of funds over some future period of time is a better approach. In this way, the characteristics of the particular situation can be taken into account. Such a projection is developed through the combination of a predicted budget and a cash forecast. The budget is based on recent operating experience plus your best judgment of performance during the coming period. The cash forecast is your estimate of the cash you will need to support the program outlined in the budget. Thus, the budget and the cash forecast together represent your plan for meeting your working capital requirements.

Once you have a systematic plan there are various ways of financing it. The final selection depends, of course, on the needs and resources of the individual concern. Three common procedures are borrowing against accounts receivable, borrowing against inventories, or a combination of both.

Care should be taken to revise budgets and cash forecasts upward or downward as developments indicate. Facts can be substituted for estimates as the year unfolds by entering actual monthly figures alongside predicted figures, observing the variations, and analyzing their causes and effects.


# Plan Your Working Capital Requirements

by EDWARD F. REITER

Net worth may be defined as the excess of assets over liabilities. Often, a business which has such an excess would appear to be in no danger of failure for financial reasons. Its net worth would appear to make it strong. Yet experience shows that more businesses fail in the presence of a balance-sheet surplus than otherwise. The critical factor is cash in working capital. Without it a business can't pay its debts, even though it may own things worth more than it owes. Lacking cash or its equivalent, a firm may be as good as bankrupt. Solvency means liquid assets when you need them.

Is this problem of planning working capital requirements peculiar to small business? No, not peculiar. but detailed planning is more commonly a problem to small firms than it is to the larger, better staffed concerns. Business management in the manufacturing field usually requires the elements of salesmanship, production ability, and financial administration. Such talents can be hired by the large company but the management of a small business is usually concentrated in one or two persons who rarely possess all three talents. Most often it is experience in financial planning that is lacking. Help must come from some outside source.

### What Is Working Capital

At the risk of over-simplification, three important definitions are outlined below—just so that everyone will be thinking in the same terms.

Working capital is the excess of current assets over current liabilities.

Current assets are those that can and probably will be converted into cash within the ensuing year. They normally include cash, good accounts or notes receivable, and inventory at your cost or the price at which it can be replaced, whichever may be lower. They may include prepayments such as rent or insurance, although some accountants will not consider as current assets anything that could not be converted readily to cash in the event of liquidation. Current assets do not, of course, include such fixed investments as plant and equipment, securities or cash value of life insurance which are not scheduled for conversion within the year; nor do they include obsolescent inventories, doubtful receivables, or intangibles.

Current liabilities are those debts which must be paid within the next 12 months. They normally include trade payables, short-term bank loans, accrual items such as insurance and utility bills, and early ma-

turing installments of any funded debt you may have such as mortgages or term loans. Don't forget there are income tax payments, too!

### How Much Working Capital

Years ago there was a bankers' cliche that the relation of current assets to current liabilities should be in a 2-to-1 ratio or better. If your "current ratio" met that magic formula you were in good financial health. If not, you were in trouble. One still hears the old 2-to-1 refrain occasionally, but you can forget it. Today, it is recognized that the amount of working capital you need depends on the kind of business you're in. Broadly speaking, the more reliable your receivables, the more salable your inventories, and the more stable your operations, the easier it is to borrow. By the same token, the greater your ability to borrow quickly, the lower your current ratio has to be. If you can borrow readily, your requirements for reserves of your own cash are reduced.

Quite simply your working capital must be sufficient to produce cash to pay your obligations when they become due. No rule of thumb or arbitrary standard will serve to measure your requirements. To know them with any degree of certainty takes individualized planning.

### Importance of Working Capital

Apart from the fact that you won't stay in business long if you don't pay your debts with reasonable promptness, adequate working capital contributes importantly to your net earnings.

### The Operating Budget

You plan your working capital requirements by use of a budget or forecast. Generally speaking such a device answers one or both of two questions. How much money will you make or lose next month, or next quarter, or next year? And will you have enough cash to conduct your business in accordance with your plans? The answer to the first question may be called an operating budget. The second requires a cash forecast which must be developed on the basis of the operating results. Therefore, consider first the operating budget.

This operating budget might be defined as a pro forma or predicted profit-and-loss statement. Consequently, it concerns itself with events over a selected period of time in the future. While this might be any period in which you are interested, assume here that you want to plan your program for a full year. Presumably you will begin with an estimate of annual sales, using as a base last year's experience and adding the increase you expect. No significant change in your cost of sales is anticipated, so you use last year's percentages for costs of materials, direct labor, and manufacturing overhead. These bring you down to a gross profit figure comparable, percentagewise, to last year. Since some of your expenses, such as rent, insurance, and taxes are fixed, they fall readily into place. Other expenses such as administrative salaries and advertising, are controllable. Still other expenses like commissions will vary in relationship to sales. You exercise your best judgment in estimating these items and complete your budget. In abbreviated form the result could look something like Table 1.

The indicated ratio of profit to sales is perhaps not so high as you would like, but if your sales forecast has been conservative you may be able to "beat the budget" and carry a larger percentage of gross receipts down to net profit. Please note, incidentally, that this summarized budget has not considered nonoperating income or expense since these are presumed to offset each other. Similarly, it does not account for expenses like depreciation which do not require the outlay of cash. Also omitted is an estimate of income tax since this is a mechanical computation and almost totally out of your control. For purposes of later analysis, note finally that beginning and ending inventories are presumed to be identical.

### Cash Forecast

Now you are in a position to figure out what it will take to finance this program.

Just as the operating budget is defined as a future profit-and-loss statement, the cash forecast may be considered a pro forma, or predicted, balance sheet. As you know, a balance sheet presents your financial position at a given instant of time and is apt to look far different in December from what it will be 6 months later. Remember that your business is seasonal. Construction and building usually are most active during the warmer months so your sales and resultant receivables will build up to their highest point during that period. Correspondingly, your manufacturing volume will be concentrated in the months just ahead of that selling season and your inventory requirements will be at their highest. By year-end your inventory should be very much reduced, most of your receivables should be collected, and your cash position should be relatively strong.

To plan your working capital requirements it is important to know the "cash flow" which will be generated from your projected profit-and-loss statement. This involves simply a consideration of all elements of cash receipts and disbursements at the time they occur. But first you will have to make certain computations and assumptions. The six basic assumptions used here are as follows:

(1) Sales will not develop evenly over the year so you will have to break your projected annual sales into 12 monthly figures. However, experience tells you the approximate percentage of annual sales you may expect in any given month, so you can apply these percentages to your anticipated total volume and spread the monthly figures accordingly.

(2) It is assumed that beginning and ending inventories will be constant but that there will, of course, be variations throughout the year.

*(Continued on page 38)*

Table 1: operating budget for year ending December 31, 1958

| | | |
|---|---|---|
| Net sales | | $400,000 |
| Cost of goods sold: | | |
| Beginning inventory | $ 55,000 | |
| Add-Materials used | 200,000 | |
| Direct labor | 40,000 | |
| Other manufacturing expense | 60,000 | |
| | $355,000 | |
| Less: Closing inventory | 55,000 | 300,000 |
| Gross profit | | 100,000 |
| Selling expense | $ 60,000 | |
| General and administrative expense | 26,000 | 86,000 |
| Operating profit | | $14,000 |

# Sales CLINIC

### The First 10 Seconds

What's the most important single span of time in selling? Some will argue—and quite logically—that the crucial period is when the contract is being signed, or when the customer asks for the product or picks it off the shelf. Another group will say the decisive time span is when the customer is making up his mind.

We don't want to slight either of these views—they both have considerable merit and have a wide following. But we believe another—and in our opinion a more important—span precedes either the sale itself or the period of decision. This is the first 10 seconds of customer contact.

Face-to-Face Contact

Architects, contractors, builders, and engineers are people, first of all. They formulate opinions and beliefs in much the same way that all of the rest of us do. When they first meet someone—whether it's in the office or at a social gathering—the opening few words, the general appearance, the grip of the hand shake, the smile, and the way he's greeted with the eyes all go to tell a story. And this story can be harmful, meaningless, or it can introduce a long, pleasant, and profitable business relationship. Once the mood of sincere interest, desire to help, and friendliness has been established, the sale, if there is one to be made, will be that much easier.

Advertising

In advertising, the first 10 seconds of contact is equally important.

Consider a newspaper or magazine ad for concrete block. On the same page with this ad, there likely will be some news or an article along with a variety of other ads. So, from the very beginning, the concrete block ad is faced with competition. Unless the reader goes through his newspaper or magazine twice—once for the news and once for the advertising—the time to capture his attention is just before he reads the feature on the page and just after he finishes with it but before he turns to the next page. How long is this? Not more than 10 seconds, if that much. Almost the entire message of the ad has to be clear at a glance—if possible, contained in just the headline and the illustration. And further, the ad must have a zing so that it isn't lost in the competition.

This same urgent need for immediate, interesting identification holds true with other forms of advertising. A home owner with vague notions of some day using ready mixed concrete (or asphalt) on his driveway won't be persuaded to investigate costs tomorrow if your radio or television commercial falls on deaf ears. His interest in what follows the news commentator lasts for just a few seconds; then it wanders off, or someone starts a conversation during the commercial.

Most direct-mail advertising goes immediately into the wastebasket. Only a few pieces—ones that catch the reader's interest or ones that contain specific technical information about a useful product—receive more than just a cursory glance.

Plants and Equipment

The same point can be made for the less-than-10 seconds it takes for a motorist to see a ready mixed truck or pass a block plant. His first impression may help him to decide never to do business with that firm. Or if he is favorably impressed, he may decide to specify that company's particular product.

### Little Versus Big

Though it's often said that the big fellows have the advantage, it doesn't always prove true. Though the large and staid, well-established companies have wealth and facilities in their operations, they don't always take all of the gravy. The young, growing, and alert organizations have a couple of advantages on their side also. Largest of these, perhaps, is the fact that young firms are not straight-jacketed to the tried and true approaches. Changes to encompass new ideas and new methods easily can be incorporated into their operations.

### The You, You Present

Admittedly, a good portion of the selling that is done to contractors and builders doesn't require a brand new suit and a brightly polished pair of shoes; but it still might be a good idea if, just before you step out to meet your first customer in the morning, you would take a look at yourself in the mirror.

What looks back at you is what will be seen by your customer. If, at the very least, the reflection doesn't have a friendly and honest face, it might be well to step back a few paces and then approach the mirror a second time.

### Watch Your Competitor

A close look at what your competitor is doing to promote his products—similar products to yours—can give you a good insight into how they are selling and to whom they are selling.

Also, it can give you a good deal of insight into how valuable your competitor thinks a particular market is. Knowing the cost of his advertising, you can quickly determine how much value he places on sales to any one particular group—architect, engineer, house wife, builder, contractor, county officials, etc.

Suppose that you usually need an inventory large enough to support the sales of the ensuing 3 months. In this event, purchases of materials and cash expenditures for direct labor and manufacturing overhead will have to produce an inventory that at each month-end will equal cost of sales for the following 3 months, as forecast. Consequently, the cash expenditures for these elements of manufacturing cost will not relate directly to your monthly cost of sales but rather to your monthly production schedule.

(3) All sales are made on terms and your invoices are normally payable in the month following delivery, although some prompt-payment discounts are offered your contractors and builders to stimulate early payments. By and large, however, you have found that you ordinarily carry about 60 days' sales on the books. This pattern will have to be considered and your forecast assumes, therefore, that receivables outstanding at the end of each month are equivalent to the sales which were made during the preceding 2 months.

(4) Trade credit is available to you and most purchases are subject to cash discount if paid by the tenth of the following month. To take advantage of this source of income, you will project all trade payments in the month following purchase. For this reason your monthly purchases, while not a part of your projected balance sheets, are an integral part of your calculations.

(5) Cash disbursements for general and administrative expense fall into the months indicated by the operating budget.

(6) Any expenditures for fixed assets will have to be planned in advance and reflected in the forecast even though not included in the operating budget.

Using these assumptions you can predict your cash flow and also your balance sheet position at the close of each month.

Observe that you are confronted with a prospective cash deficiency for the period from March through November, and that the cash flow assumes the availability of bank credit during that period. If your forecast is reasonably accurate, however, collections of receivables will cure the deficiency by December. Obviously, working capital requirements of this timing and magnitude call for a visit to the bank.

### Methods of Financing

You are seeking short-term credit for seasonal needs, a situation with which your bank lending officer deals every day. Perhaps he will make available to you an unsecured line of credit. On the other hand, he may feel that your requirements are somewhat out of proportion to your firm's net worth — especially in the light of last year's operations — and that his loan should be secured. In this event you will have two classes of collateral to offer him.

Accounts receivable will be highest in peak months, the time of your greatest need for bank credit. These can be assigned and should provide the bank with an ample margin of safety.

During the peak months you may also be carrying the largest inventory. If need be, a field warehouse can be set up in your plant by a warehouse company acceptable to the bank and the receipts will then be available as collateral.


For Sale

HOT WATER & STEAM
SUPPLY UNITS
500 to 10,000 gallons per hour
Temperatures from 90° to 210° F.

IF you need
Hot Water and Steam
for All Winter Pouring

Viking Superior Unit here . . . means
ALL WINTER POURING
. . . here

Get the facts . . .
PHONE . . . WRITE

Boston, Mass.—
Wellesley 5-3529
Buffalo, N.Y.—
Parkside 0623
Brooklyn, N.Y.—Shore Road 8-4330
Chattanooga, Tenn.—Tucker 6-1277
Chicago, Ill.—Wolbrook 5-9702
Grand Rapids, Mich.—Glendale 4-0879
Greensboro, N.C.—2-6420
Philadelphia, Penna.—
Murray 8-2865
Rochester, N.Y.—
Locust 2-5279
Washington, D.C.—
Taylor 9-2522
Waterbury, Conn.—
Plaza 5-0109
In Canada Moffats, Ltd.
Toronto, Ont.—
Cherry 1-2611

VIKING SUPERIOR CORP.
Manufacturers of Water Heating Equipment

Telephone
SHore Road 8-4330
731-65th Street
Brooklyn 20, N.Y.

In some combination of these possibilities you should be able to obtain the credit you need to take care of these working capital requirements.

### Making the Budget Work

The preparation of the operating budget and of the cash forecast has already accomplished several objectives. You have determined the total effect on earnings of your several changes in operating organization and methods. You know what your cash requirements will be, and you have been able to present them intelligently to your banker in order to gain his support.

But don't stop here. Make your budget work for you. As the year unfolds, enter your actual monthly results alongside the budgeted figures and study the variations. If they are unfavorable, perhaps they can be corrected if caught in time. A lag of sales behind the budget may suggest an analysis of sales techniques and/or sales personnel. High material costs may call for a change in purchasing policies or of suppliers. Excessive labor costs may be the fault of your foreman or of your production schedule.

Finally, have the common sense to revise your budget — upward or downward — if experience so dictates. Rising business activity often means a working capital shortage. Remember that an increase in sales usually brings with it an increase in receivables and inventories, and in your needs for cash. Thus, it also adds to your working capital requirements. Know about such developments in advance.

■

## Home Building Convention to Kick Off 1958 Season

New and improved products in the building industry will be exhibited January 19-23 at Chicago during the 14th annual convention and exposition of the National Association of Home Builders. Displays in 780 exhibit spaces will be set up in the Conrad Hilton Hotel, the Sherman Hotel, and the Chicago Coliseum.

The convention program will feature leaders in business, industry, and government taking part in panel discussions, forums, workshop sessions, and dramatizations. Among the topics to be covered are financing, merchandising, building techniques, and community facilities.

## Housing Contracts Gain in September to Bring the Year's Total Almost Equal to 1956 in Dollar Volume

Housing construction in September of this year took another climb over the sluggish start recorded during the first half of 1957.

September's number of units contracted for was a little above that of the previous year, according to figures released by F. W. Dodge. This increase brought the total dollar volume for 1957 about equal with 1956. Actual number of contracts, though, is still down some six per cent from the nine-month total recorded a year ago.

Outside the area of housing, the picture wasn't quite so encouraging. Non-residential building, though still slightly ahead of 1956 for the nine-month period, was weak in many areas. Heavy engineering was off 11 per cent in September, though for the year it was still 5 per cent ahead.


KENT BLOCKMAKER

IDEAL MACHINE *for smaller plants*

• • •

EXCELLENT AUXILIARY *for large plants*

A push button starts the cycle during which operations occur automatically in sequence.

• • •

Uniform delivery of aggregate to the mold box is effected by agitation and mold box vibration assures uniform block density.

• • •

A SPECIAL air cylinder powered press head speeds the cycle and assures blocks of uniform height.

• • •

Consistently produces blocks at a rate of 5 or more per minute from any aggregate.

• • •

Priced below any machine of comparable performance.

• • •

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The Season's **Best Wishes**

To You...

It is our sincere wish
that this Holiday Season
and the coming New Year
bring you the most
in good cheer, prosperity,
and good health.

**The Presto Brick Machine Corporation**

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# *MEN IN MOTION*

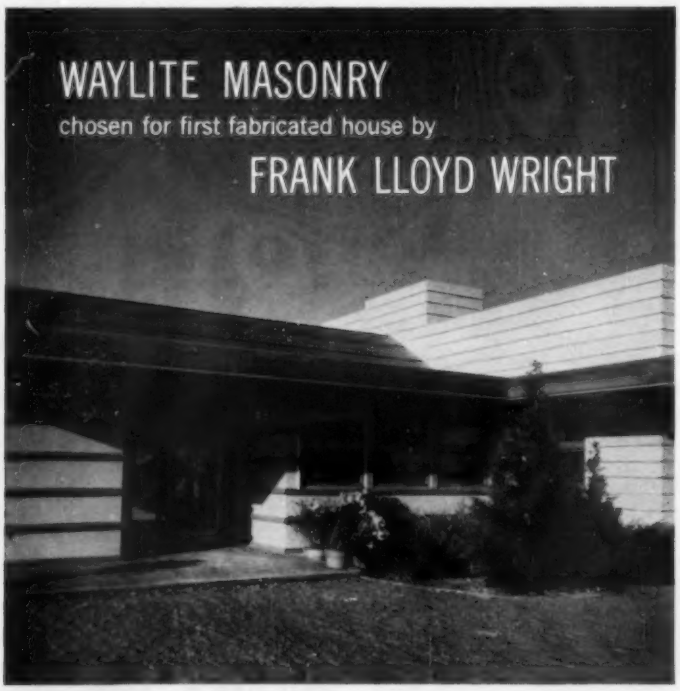
### Pettibone Mulliken Corp.

E. J. Seifert, president of Pettibone Mulliken Corporation, Chicago, Illinois, has announced a change in the marketing channels for the company's line of materials handling equipment. Regional offices, under the direction of regional managers, have been established. Each region is further divided into districts, with district managers responsible for sales within each district. A staff of service men, supervised by regional service managers, will be maintained in each region. Pettibone materials handling equipment will be distributed through industrial equipment outlets.

### Erickson Power Lift Trucks

Sales, parts, and service representatives were recently appointed by Erickson Power Lift Trucks, Incorporated, of Minneapolis, Minnesota. In the United States, these representatives are: Halsey-Reid Equipment Company of Buffalo, New York, serving western New York; Interstate Equipment Company of Statesville, North Carolina, serving the state of North Carolina; and Mercury Fork Lift Service of Wallington, New Jersey, serving northern New Jersey.

Four sales and service representatives appointed in Canada are: Huggard Equipment Company, Limited, Winnipeg, Manitoba; Ken-Dale Company, Limited, Montreal, Quebec; W. H. Stairs, Son & Morrow, Limited, Halifax, Nova Scotia; and Roy Wright, Limited, Regina, Saskatchewan.


Erdman Homes, Madison, Wisconsin, builder. Top view shows main entrance. Lower shows use of Concrete masonry units.

Frank Lloyd Wright's design of a residence for fabrication is now a reality. The first has been built at Madison, Wisconsin, and Waylite Masonry units were used for the massive utility core . . . the enormous fireplace . . . and the wall and flowerbox surrounding the terrace.

Waylite Masonry Units are always of high quality. They offer many unusual advantages. See 16 pages in Sweets, or write for catalog of engineering data and construction details. The Waylite Co., 20 North Wacker Drive, Chicago 6, or P.O. Box 30, Bethlehem, Pa.

WAYLITE
MASONRY UNITS

The lightweight unit for modern construction

(ABOVE) Typical of full-page Waylite advertisements that have appeared monthly in major architectural journals during the past 8 years in addition to Waylite's 24-page catalog in Sweets giving test data and construction details. . . . Waylite is made in the most modern type of aggregate plant where all processing factors are under rigid quality control. The aggregate is made into lightweight units by leading products manufacturers. . . . The exceptionally high merits of Waylite masonry units are widely recognized. . . . The Waylite Co., 20 North Wacker Drive, Chicago; or P. O. Box 30, Bethlehem, Pa.


### Lamson Mobilift Corp.

F. M. Mayse

Lamson Mobilift Corporation, Portland, Oregon, has moved its service department headquarters from Chicago to the factory location in Portland, according to a recent announcement by John R. Titlow, vice president.

The service department is headed by Floyd M. Mayse, formerly district manager for the west central region and supervisor of the Lamson Mobilift Chicago branch operation. Mr. Mayse has served as district manager for the southern and southwestern regions as well.

### Memphis Equipment Co.

The Memphis Equipment Company, of Memphis, Tennessee, has completed the initial phase of a long-term, overall plant expansion by remodeling buildings at the main plant. The company recently acquired more land adjacent to its Memphis plant and a four-acre industrial site on the Mississippi waterway for future development.

### Union Wire Rope

A plan has been approved whereby Union Wire Rope Corp., Kansas City, Mo., will be purchased by Armco Steel Co. The plan, which was decided upon recently by both boards of directors, must await final approval by the stock holders of each company.

Forrer's XL-100

Powdered

# Concrete Plasticizer

## does a better job . . . yet costs less!

### Costs only ¼c per bag of cement

Cut your plasticizer costs to the bone with XL-100 dry powder. It weighs less — goes farther and does a better job. New process brings you a plasticizer that acts faster, takes 1/3 the amount (by weight) and does a superior job. Concrete blocks are shades whiter, denser and outside surfaces have smoother .texture. Increase contractor, builder satisfaction — deliver a better block for less than 1/4c per bag of cement. Investigate Forrer's XL-100 today!

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Forrer's XL-100 is a dry hydrated powder with wetting and dispersing agents. It's easy to use and economical too — costs but ¼¢ per bag.

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- ★ **De-Solv-It.** Dissolves concrete — without harming metal
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- ★ **For-Air.** Concentrated air entraining agent
- ★ **Ramsey Moisture Probe.** Measures sand moisture content
- ★ **Ramsey Moisture Meter.** Regulates water in concrete mix automatically
- ★ **Kover-Kote.** Transparent protective film for ready mix trucks.

**Forrer's**
PRODUCTS FOR MASONRY
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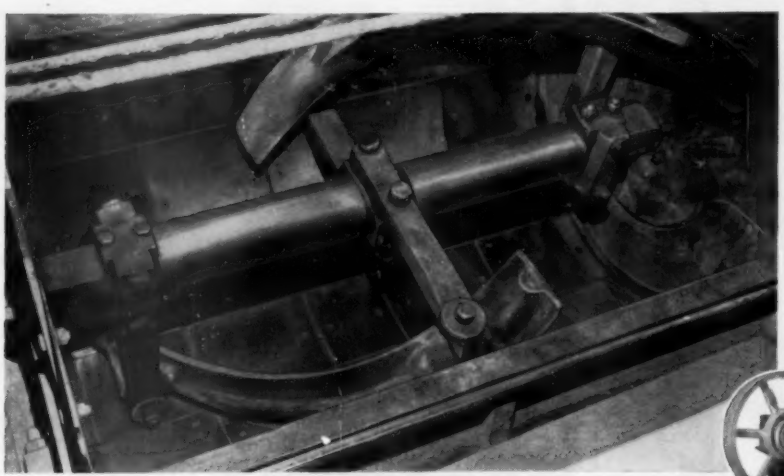
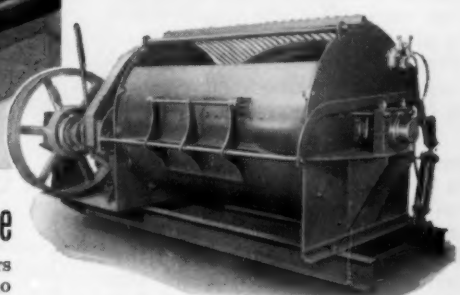


# BATCH MIXERS *by* BESSER



## No liners or blades replaced during 4½ years service

The illustration above shows one of the two 50 Cu. Ft. Besser Batch Mixers after 4½ years of hard continuous service in a Mid-Western block plant. At no time during the 4½ years was it necessary to replace either blades or liners. Besser Mixers are built to resist toughest operating conditions. Drum shells are made of heavy rolled steel. Replaceable inside liner sections are made of Ni-Hard abrasion resisting iron. Extra heavy blade shafts prevent bending or twisting. Mixer Blade Shaft Covers eliminate build up and wear on blade shafts and permit easy cleaning. Twin spiral mixer blades are also made of Ni-Hard abrasion resisting iron. Thousands of enthusiastic users attest to Besser Mixer economy and long life performance. Ask for Bulletin No. 111-A

• *Besser 50 cu. ft. mixer with motor, V-belt drive, steel cut gears running in a continuous oil bath and fully enclosed anti-friction bearings. Other sizes available: 5, 12, 18, 25, 30 and 40 cu. ft.*

**Note: All blades and liners are made in Besser Company's own foundry and licensed by International Nickel to produce and sell abrasion resisting white iron under the trade name . . .Ni-Hard.**

**BESSER Company,** Complete Equipment for Concrete Block Plants *Alpena, Michigan, U.S.A.*

# NEWS *from the Manufacturer*

METHODS
MATERIALS
EQUIPMENT
TOOLS

## Canvas Tarps Form Curing Tent for Concrete Units

A method employed in the construction of buildings for the International Business Machine Corporation was the use of 350 Hoosier canvas tarpaulins as canvas covers for curing post-tensioned concrete beams and girders.

Hot air was blown into the enclosure formed by the tarps, providing uniform curing of the units. This was done for seven days on each newly-poured unit. According to the manufacturer, bad weather which struck during this phase had no adverse effect on the operation.

The manufacturer of the tarpaulins is Hoosier Tarpaulin and Canvas Goods Company, 1302 West Washington Street, Indianapolis 6, Indiana, from whom more information is available.

## Compressed Air, Introduced by the Fuller Airmerge Quadrant System, Blends Dry, Pulverized Materials

An aeration system of blending dry, bulk pulverized materials has been developed by Fuller Company of Catasauqua, Pennsylvania, a subsidiary of General American Transportation Corporation.

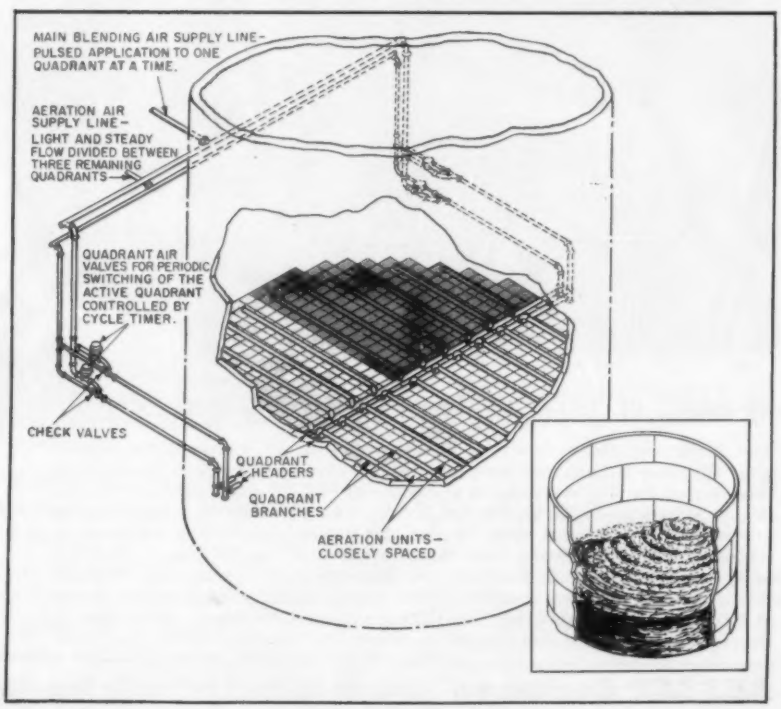
Known as Fuller Airmerge Quadrant Blending, the system can be used on any materials which can be fluidized by compressed air, and will blend materials with different bulk densities and finenesses.

The quadrant blending method makes use of a round silo with a substantially flat bottom. This silo bottom is covered with Fuller aeration units which are closely placed to give uniform distribution of air. They are faced with a porous refractory block to release compressed air in fine jets.

The air is applied to one quarter section of the silo bottom at a time, in a volume sufficient to fluidize the dry pulverized material above that individual section. As a result of being expanded and at the same time becoming fluid, this material rises above the level of the adjacent three quadrants and flows out across them. At the bottom of the temporarily inactive quadrants, a small amount of compressed air is meanwhile being released — enough to make the material mushy but without basic change from its unaerated density.

The rising column of expanded material in the actively aerated quadrant is thus partly surrounded with heavier material which tends to slump over into the active quadrant. Here it becomes aerated, expands, rises, and flows outward. Continuous roll-over motion in a vertical circuit is obtained which results in thorough mixing of the materials.

Aeration is periodically switched (each 5 to 15 minutes, depending on material) from quadrant to quadrant in rotation, and after one circuit of the silo bottom all of the material has been put into motion. Two such circuits will result in blended material. More information on the Airmerge System is available from Fuller Company, Catasauqua, Pennsylvania.


MAIN BLENDING AIR SUPPLY LINE— PULSED APPLICATION TO ONE QUADRANT AT A TIME.
AERATION AIR SUPPLY LINE— LIGHT AND STEADY FLOW DIVIDED BETWEEN THREE REMAINING QUADRANTS
QUADRANT AIR VALVES FOR PERIODIC SWITCHING OF THE ACTIVE QUADRANT CONTROLLED BY CYCLE TIMER.
CHECK VALVES
QUADRANT HEADERS
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AERATION UNITS— CLOSELY SPACED

# TRACTION

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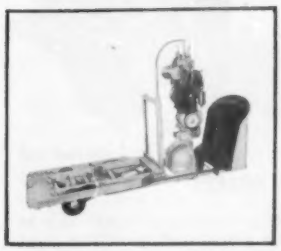
**Truck-Man's 6,000 lb. capacity Y-60 with duals will move quickly and easily across a rough unpaved yard with a full 3 ton cube of blocks.**



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**Ask about the Truck-Man Model DHP 4500 lb. capacity, low lift truck—the lowest cost mechanical handling you can buy from block machine to kiln to cubing area. *NOW* with *REWIND STARTER STANDARD* and optional LP Gas.**

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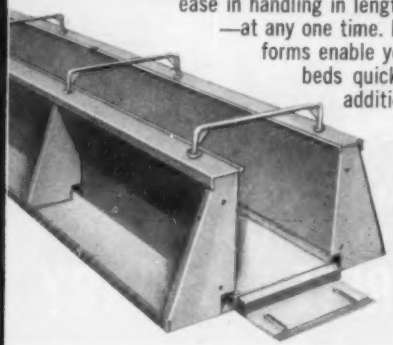

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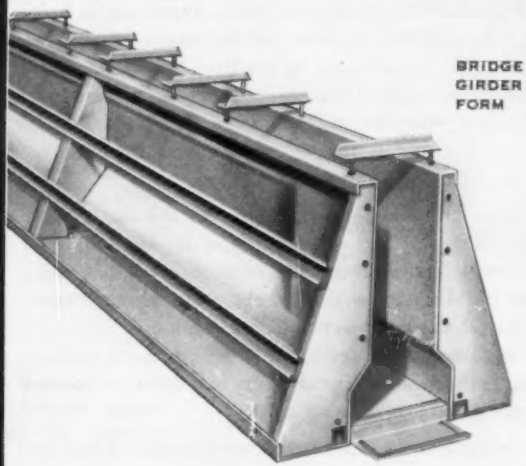

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The choice of construction materials is greatly influenced by architects, engineers and builders. Those who design and build quality concrete masonry structures are valuable assets to your business.

Portland Cement Association advertising is helping you turn this relationship into more sales. Every month advertisements in leading farm and home magazines tell millions of readers to call their local concrete masonry manufacturer for the names of architects and builders experienced in concrete masonry design and construction.

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Using such a file of reliable architects and builders is one of three essential steps in developing more business. The others are: (2) making quality block that complies with ASTM and Federal specifications for moisture content, strength and water absorption and (3) keeping a list of quality concrete masonry structures in your community from which you can select examples to show prospects when they call.

**PORTLAND CEMENT ASSOCIATION**
33 W. Grand Avenue, Chicago 10, Illinois
A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work

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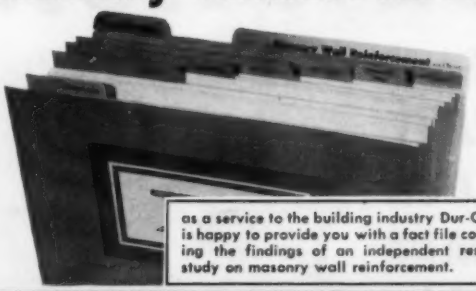
THE FACTS RECOMMEND
**DUR-O-WAL**
masonry reinforcement



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Address_____
City_____ Zone____ State____
Please furnish name of my nearest dealer ☐

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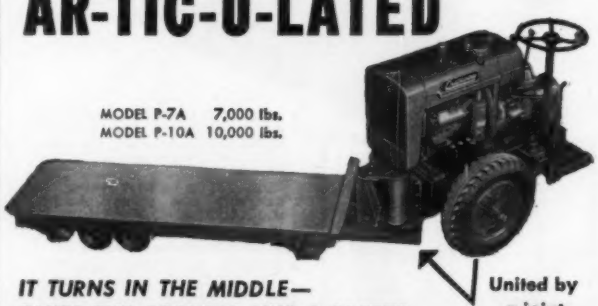



***IT TURNS IN THE MIDDLE— TAKES THE CORNERS LIKE A BREEZE***

*Write for literature*

Erickson has created a revolutionary new idea in platform trucks—it's ARTICULATED—with a joint or pivot between platform and drive wheels. Models P-7A and P-10A are the units for the new and unusual operations,—autoclaves, for instance—where you need utmost maneuverability with heavy duty capacity. With the ARTICULATED design, platform bed can be made up to 10 or 12 feet and still handle heavy, bulky loads with ease. These articulated models are in addition to the veteran Erickson P-5 and P-7 standard models, and built with the same rugged durability.

the WORKHORSE of LIFT TRUCKS

**Erickson**
POWER LIFT TRUCKS, Inc.
221 St. Anthony Blvd. N. E., Minneapolis 18, Minn.

## Dual Squelch on Motorola Mobile Radio Cuts Interference, Permits Preliminary Channel Monitoring

Dual squelch has been added to the Motorola Private-line radiophones to provide for gradual conversion to a private mobile communication system. The squelch also permits channel monitoring before transmitting messages.

During the transition period, the dual squelch base station can receive from both the Private-line and other mobiles in the system. Any of the Private-line mobile units equipped with "Dual Squelch" can also listen to the other mobiles by turning a switch to dual operation.

The dual squelch also benefits by allowing use of the radiophones in a system or area not equipped for Private-line radio operation.

Dual squelch allows monitoring of the channel before transmitting. By turning to dual operation, a mobile unit operator can listen to see if the channel is free before transmitting. This monitoring can be done manually, by flipping a switch, or through the use of an automatic microphone hanger switch. At the base station, dual squelch can be turned on by pressing a bar switch on the base of the microphone.

The equipment is available in the 25-54, 144-174, and 450-470-megacycle, mobile FM 2-way frequency bands. More information is available from Motorola Communications and Electronics, Incorporated, Department DS, Technical Information Center, 4501 West Augusta Boulevard, Chicago 51, Illinois.

## Thew Front-End Loader Accelerates in Forward and Reverse by Foot Pedals, Leaves Hands Free to Steer

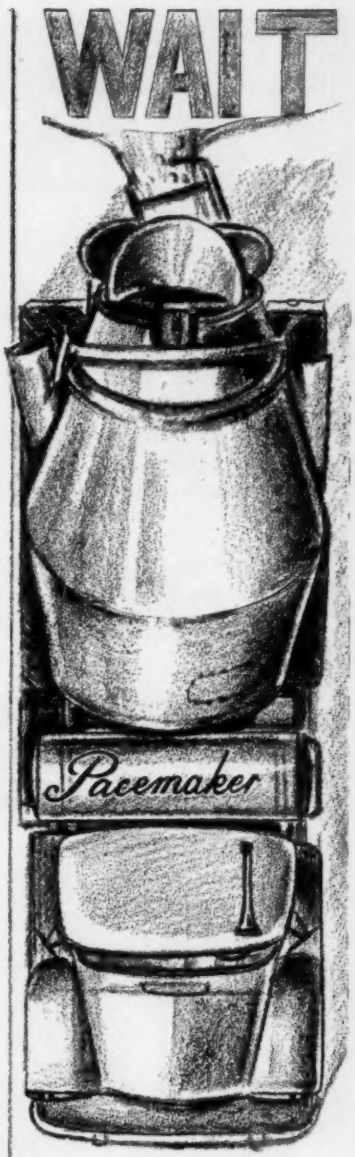
The Thew Shovel Company, Lorain, Ohio, has begun production of the first model of a new line of rubber-tired front-end loaders. The new product has been named Moto-Loader and the first model is a 4-wheel drive, 1-¾-yard-capacity unit, designated Model ML-153.

It is available with either gasoline or diesel power and utilizes an Allison "Torqmatic", 3-speed, powershifted, full reversing transmission and integral torque converter with a 2.5 to 1 ratio. This provides a number of "gear" ratios in each speed range. Shifts can be made into any of the three operating ranges under full power. Top speed of the unit is 21.4 miles per hour.

Two adjacent foot pedals — one for forward travel and one for reverse — give the operator direction control with one foot. The other foot is used for braking. This frees both hands for steering and hoist and bucket controls.

Under the forward-reverse foot pedals are additional accelerators, to provide travel speed control in either direction without removing the foot from the shifter pedals. These accelerators are used at the option of the operator as there is a conventional foot accelerator in the normal position. Equalizing the forward-reverse pedals gives an additional neutral without hand shifting the transmission.

Hydraulic controls are mounted on the dash with a toggle hoist lever to allow constant hoisting force while the operator manipulates the bucket tilt control. Bucket roll-back at carry position is 40 degrees. Forward reach at 7-foot dumping height is 40 inches. The peak lift capacity of the new Moto-Loader is 11,000 pounds at 0 miles per hour with a carrying capacity of 6000 pounds at 4 miles per hour. More information is available from the Thew Shovel Company, Lorain, Ohio.

**BUY NOW AT TREMENDOUS SAVINGS!**

GMC 6x6

UNUSED! FACTORY-NEW PERFORMANCE!

Save up to $3,000 on an unused Army 6x6 . . . *guaranteed* new-truck performance. **Rugged Front-Wheel Drive** . . . gives *extra* power when the going gets tough! **Tandem Rear Axle** . . . carries heaviest loads over roughest terrain on "off-road" jobs. **Delivered On Approval!**

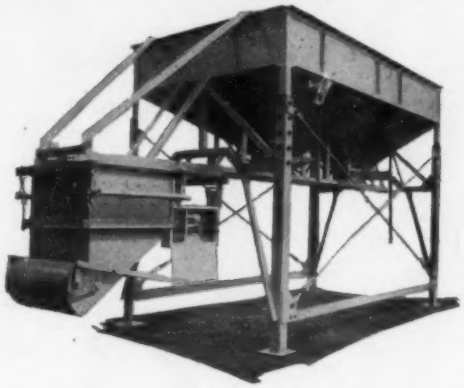
**For Specifications, prices, delivery write, wire or phone collect: JAckson 5-7841**
**MILTON Y. TOOMBS, JR., Sales Manager.**

MEMPHIS EQUIPMENT Company
ARMY TRUCKS · PARTS
CONSTRUCTION EQUIPMENT
766 SO. THIRD STREET · MEMPHIS, TENNESSEE



**WINSLOW BINANBATCH**

**COST SAVING EQUIPMENT—FOR USE WITH 10S-11S-14S-16S MIXERS—AND AT CONCRETE PRODUCTS AND PIPE PLANTS**



***OVERHEAD BIN CAPACITY 23 OR 40 TONS***

Binanbatch can batch and discharge into one or two mixers. Hundreds of users of this equipment can tell of the cost saving advantages of the Binanbatch.

***We offer batching bins for ready mix business at low investment***

WRITE FOR COMPLETE DETAILS

**WINSLOW SCALE COMPANY**

P. O. BOX 1198 • TERRE HAUTE, IND.

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**CLEANING TOOLS**
ELECTRIC OR PNEUMATIC

*Zip away* **SCALE RUST PAINT**

Powerful rotary chipping action completely removes stubborn accumulations from iron, steel, brick, concrete, etc. with less effort. Adjustable depth shoe for controlling depth of cut. Renewable cutter heads. Two sizes in both electric and pneumatic models. Lightweight.

*Write Dept. 15 for the money-saving facts.*

**AURAND MFG. & EQUIP. CO.**
**1210 Ellis St. • Cincinnati 14, Ohio**



**WAL-LOK (MORTAR JOINT REINFORCING) 6 POINTS of SUPERIORITY**

**1** WAL-LOK is Deformed, Knurled and welded without impairing tensile strength—Assures positive bond for full length of structure.

**2** Cross Bars hold WAL-LOK up—for complete bond with mortar all the way around.

**3** WAL-LOK is packaged (25 twelve foot sections per bundle) for easy handling, fewer splices, less waste.

**4** SuperStandard has 8 ga. side rods—more bonding surface, greater tensile strength than 9 ga. and is the minimum recommended by the National Bureau of Standards.

**5** WAL-LOK and only WAL-LOK gives the same bondage per square inch of surface with SuperStandard grade as with the Extra Heavy grade.

**6** WAL-LOK is manufactured in one factory—quality control is strictly maintained—immediately available, everywhere through leading distributors and dealers.

WAL-LOK

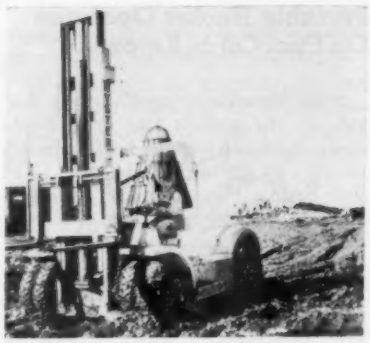
WRITE FOR YOUR COPY OF THIS 4-PAGE FOLDER TODAY ! !

**ADRIAN PEERLESS, INC.**
**1433 E. Michigan • Adrian, Michigan**

## Chrysler Engine Is Added to Hyster Lift Trucks

A 154 horsepower V8 engine with a matching torque converter has been made available as optional equipment for Hyster lift trucks in the 15,000 to 20,000 pound load capacity. According to the manufacturer, the larger engine and torque converter transmission give the truck added power for handling large loads in unimproved yard areas or where mud, snow or sand hinder traction.

The Chrysler engine provides power reserves for acceleration, for speeds up to twenty miles per hour, and for climbing grades with full loads. Engine power is automatically adjusted to travel requirements through the torque converter, thus eliminating the need for shifting from low to high gears within each range. The transmission has three forward speeds, and three speeds in reverse.



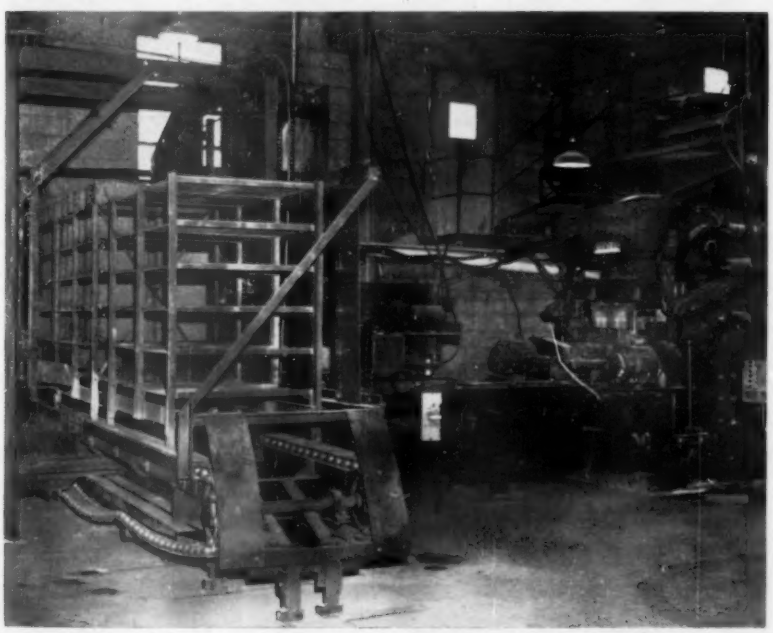
The Chrysler engine produces a maximum torque of 237 lb. ft. at 2400 revolutions per minute. Features of the new engine include overhead valve design, forced feed engine lubrication, valve rotators, a mechanically actuated fuel pump, and rubber engine mounting. More information is available from Hyster Company, 1003 Myers Street, Danville, Illinois.

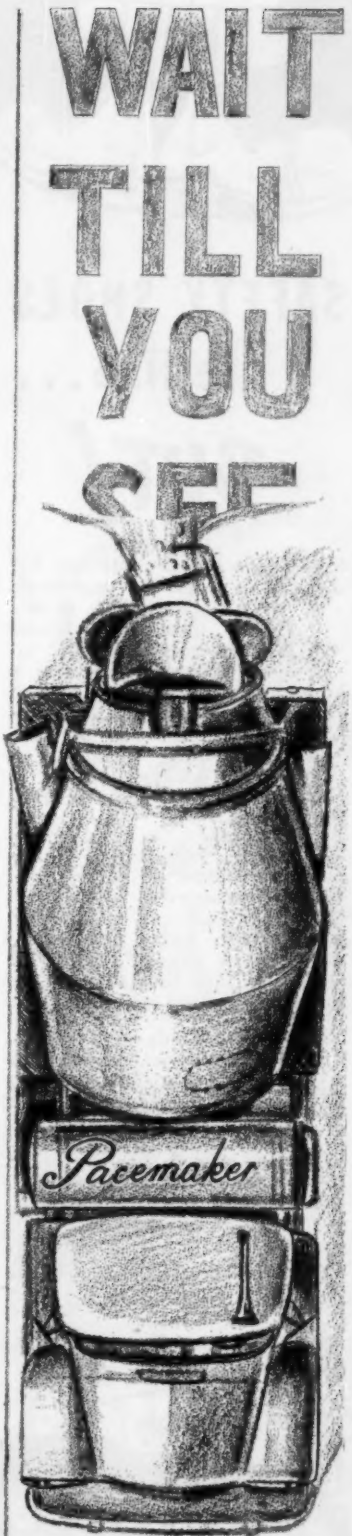
## Gocorp's Rackman Reduces Labor Force by One, Racks Green Block and Removes Empty Pallets Automatically

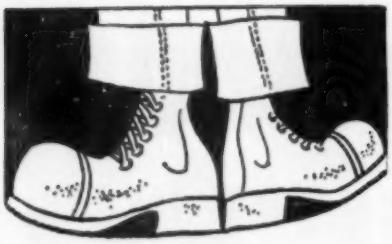
The automatic rack loader called the Rackman, produced by the Gene Olsen Corporation, 405 Grace Street, Adrian, Michigan, indexes green block onto each level of the rack. It simultaneously removes pallets from empty racks and returns them to the front pallet feeder.

According to the manufacturer, the unit takes the place of an off-bearer and eliminates the off-bearer operator. The fork truck operator puts on the empty racks and takes off those which are loaded.

The Rackman is keyed to the cycle of the block machine it is servicing. Its dimensions vary with the type of block machine in use. More information is available from the manufacturer.





**SAFETY SHOES are fine . . .**

**BUT!**

Safety shoes can save your feet, but they can be tough on weigh-batch hoppers . . . or any other type of bin or chute. The firm vibrating action of a Cleveland Vibrator is the modern, efficient way of stopping bridging or arching before it starts, and keeping granular material moving.

Cleveland pneumatic and electric vibrators have been designed for use on weigh-batch hoppers. Both these models include standard brackets and clamps for fast easy installation.

Pneumatic

Electric

Bridging of sand, gravel, cement, or even wet concrete; in the weigh-batch hopper is broken up quickly and quietly with a Cleveland Vibrator.

There is no better way to handle bulk material handling problems than with a modern Cleveland Vibrator.

Write for further details and prices.

2708 Clinton Ave. • Cleveland 13, Ohio


## Portable Heater Operates On Fuel Oil or Kerosene

Stow Manufacturing Company has put on the market the Porto-Heat, medium-capacity space heater. Small model 120 Porto-Heat delivers 120,000 British thermal units per hour at a rate of 950 cubic feet of heated air per minute and burns .85 gallon of fuel oil or kerosene per hour.

The model 120 weighs 80 pounds and is 40 inches long by 16 inches high. One man can wheel the unit, or carry it down stairs and up ramps on the job. According to the manufacturer, it is a furnace on wheels, complete with an automatic electric ignition, a fan driven by a 1/6-horsepower motor, and a combustion chamber. This chamber, with properly baffled enclosed flame, burns the fuel without fumes or odor. It has an

automatic fuel cut-off in case of power failure.

More information is available from Stow Manufacturing Company, 246 Shear Street, Binghamton, New York.

## Edick Water Control Unit Resets After Discharge

Production of an automatically resetting, remotely controlled water control has begun at Edick Laboratories, Milwaukee, Wisconsin. According to the manufacturer, the system eliminates the necessity of manually resetting for each batch.

The operator dials the amount of water required and presses the automatic button. After the dialed amount of water has been discharged, the unit shuts off and resets to the same position automatically.

The control panel can be located up to 150 feet from the flow meter-solonoid valve assembly, eliminating the necessity of piping the water line through the control room.

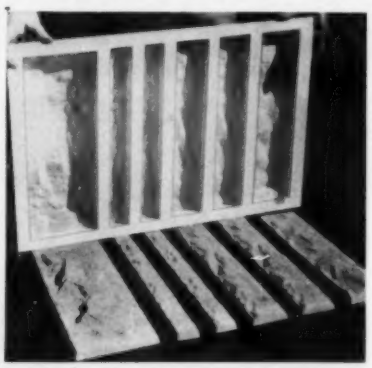
Water line size up to 3 inches can be accommodated. Dial calibration is

custom set to any range from 0-300 gallons. The unit also has a manual control should the operator desire an additional amount of water. More information is available from Edick Laboratories, Incorporated, 427 West National Avenue, Milwaukee 4, Wisconsin.

## Produce Imitation Stone Units With Plastic Forms

Forms, Incorporated, 1810 West Irving Park Road, Chicago 13, Illinois, is marketing a form which turns out imitation quarried stone for exterior siding or for interior wall adornment. "Hacienda Stone Forms," as they are called, are available without franchise or royalty restrictions.

Each form consists of a special composition plastic liner, 24 x 18 inches, which rests on a steel form.

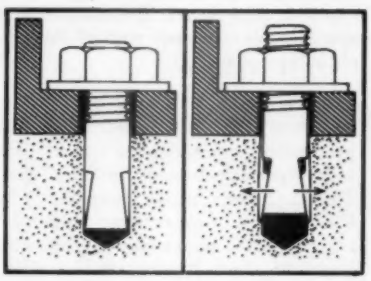


Six panels on the form produce various sized units sufficient to cover 2-1/3 square feet.

According to the manufacturer, no coating is required on the plastic liner, making for ease in casting. The masonry mixture is poured into the forms where it remains for 24 hours. At the end of that period, the stones are dumped out. There is sufficient draft for easy stripping. Rinsing the forms with water prepares them for the next pouring. More information is available from the manufacturer.

## One-Piece Anchor Bolt Expands When Tightened

A one-piece, one-sized hole expansion bolt has been developed by Kirel, Incorporated, to fasten or anchor equipment, machinery, and structural members to concrete materials.



According to the manufacturer, the Wej-It bolt expands as it is tightened and anchors without sleeves, butterfly ends, or other mating parts. Also, it requires no special tools to install and will anchor a piece to the main structure without removing from position.

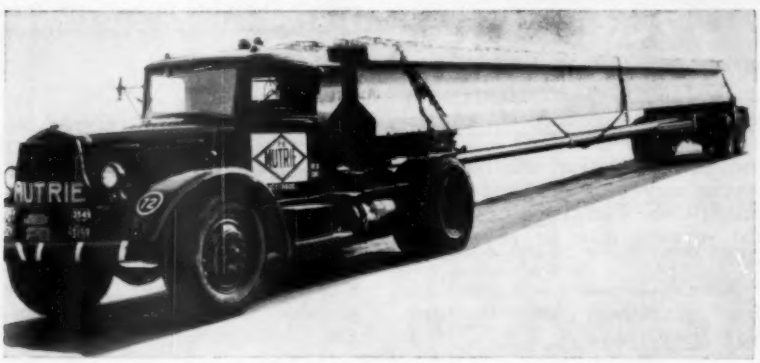
The Wej-It is available in all metals and in sizes to carry working loads from 200 to 1,000 pounds. Standard diameters run from $\frac{1}{4}$-inch to $\frac{3}{4}$-inch, and lengths from $1\frac{3}{8}$ inches to 3 inches. More information is available from Kirel, Incorporated, 326 East 28th Street, New York 16, New York.

## Pole Trailers Produced by Rogers Brothers Carry Products Manufactured in the Prestressed Industry

Rogers Brothers Corporation of Albion, Pennsylvania, have designed a line of pole trailers to handle cumbersome prestressed concrete members.

Rogers pole trailers are available with different combinations of axles and tires to meet the varying types, lengths and weights of concrete beams.

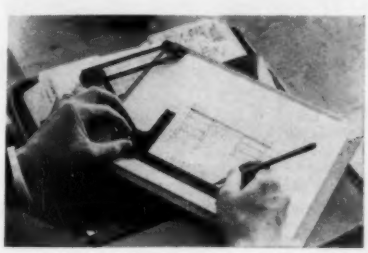
The reaches are designed to telescope so that unloaded return trips can be made with a shortened rig. More information and literature is available from Rogers Brothers Corporation, Albion, Pennsylvania.




## Portable Drafting Unit Can Be Used in the Field

A portable drafting machine called "Draftette," which can be folded jackknife-style to fit in the pocket when detached from its drawing board, has been introduced for use in office and in the field. It is attached to a portable drawing board that fits into a briefcase. The unit takes the place of T-square, ruler, protractor, and triangles and is for use in drawing, drafting, sketching and designing.

"Draftette" is of all aluminum construction, anodized jet black with white-filled numbers and letters of the scale and 180-degree protractor. It is manufactured by David Miller & Associates, Box 572, Beverly Hills, California.



# Dodson's Digest

### Block that proverb!

Dropped in to see Alex Jordan the other day. Alex is a young friend of mine who recently opened up his own concrete-block business.

Ever since I've known Alex, he's had a great fondness for proverbs. He usually managed to find one for every occasion, and this time was no exception.

"Long time no see, Alex," I greeted him.

"Absence makes the heart grow fonder, Dod," Alex replied.

With obvious pride, Alex gave me the de luxe tour of his plant, pointing out various places where he was saving money. "After all," he said, "a penny saved is a penny earned."

But when I saw some of the chipped rough block Alex was producing, I was really disturbed. "Looks like your economy measures have tossed out Calcium Chloride, too," I observed.

Alex had a proverb for that one, too. "When the shoe fits, wear it," he said. "In my case, I figured I couldn't afford any higher production costs. But how did you know I wasn't using . . . "

"You can't afford *not* to use Calcium Chloride," I broke in. "Calcium Chloride gives concrete higher early strength and increased workability. And in cold weather like this, that's a big saving in handling time."

"And time is money," Alex chimed in.

"Right," I continued, "Calcium Chloride cuts your curing time in half, so you can free your pallets sooner and step up production. What's more, Calcium Chloride helps prevent cold-weather breakage and chipping."

"I get it," Alex said. "You mean I've been penny wise and pound foolish. But tell me, how did you know I wasn't using Calcium Chloride?"

"Just a chip off the old block, Alex," I grinned. "Just a chip off the old block."

—L. D. Dodson

**P.S.** — You'll find helpful hints on the use of Wyandotte Calcium Chloride in our folder, "How To Make Better Concrete Products and Ready-Mix." Write me for your free copy. *Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.*

**Wyandotte**
**CHEMICALS**
*MICHIGAN ALKALI DIVISION*
**HEADQUARTERS FOR CALCIUM CHLORIDE**

## Automatic Device Records Amounts of Ingredients

A recently developed counter and totalizer, which enables ready-mix concrete producers to maintain an inventory check on ingredients being fed into a proportioning system, is

being manufactured by Richardson Scale Company, Clifton, New Jersey.

The counter records the weight of each ingredient used during any batch or during any required interval of time, and also totalizes the weight of all ingredients used. Twelve separate counters make up the panel. Eleven of these are used for counting ingredients and the twelfth is used for totalizing. Sizes are available for recording up to 100 ingredients.

According to the manufacturer, by knowing the amounts of material used, one can tell what's still available in storage, and the inventory supply may be replenished at the proper time. When the bin is refilled the counters may be returned to zero.

More information is available from Richardson Scale Company, Van Houten Avenue, Clifton, N. J.

## NEW LITERATURE

Concrete Pipe Tester—Bulletin PT-75, published by *Forney's Incorporated*, Tester Division, P. O. Box 310, New Castle, Pennsylvania, describes the operation of Model PT-75 concrete pipe tester. Dimensions and specifications of each part of the machine are included.

Truck Mixer Maintenance—A preventive maintenance chart for concrete truck mixers, bulletin #G-2486P., has been prepared by *Worthington Corporation*, advertising and sales promotion department, Harrison, New Jersey. Sixteen maintenance steps outlined on the chart, from hold-down bolts to water pumps, apply to all makes of mixers. The chart is designed to be displayed on garage walls and other conspicuous places calling the operator's attention to both periodic and daily maintenance practices.

Two-Way Radio—The communication products department of *General Electric*, Syracuse, New York, has published a brochure on two-way mobile radio equipment to fit individual needs based on present FCC rulings. Described in detail are items which help make a radio system more flexible.

Expansion Joints—A manual entitled "Design Practices And Uses Of Premoulded Joints In Concrete Pavements" has been produced by the *Expansion Joint Institute*, 121 Hill Avenue, Aurora, Illinois, which includes comprehensive technical data and illustrations on the many types of premoulded joints, their applications and installation information.

● Westinghouse truck mixers now feature truck engine drive. Information is available from the Westinghouse transit mixer division of LeTourneau-Westinghouse Company, P.O. Box 853, Indianapolis 6, Indiana.

# CLASSIFIED ADS

**$10.00 per column inch. Closing date for classified advertising copy is 15th of preceding month.**

## FOR SALE

**Extra good, used #9 Joltcrete mold boxes. #9 and #7 motors. Pressed steel cored pallets.**

GUY D. MOODY
1011 Chester St., Bristol, Va.

## PRICED FOR QUICK SALE

1 — Used Stearns Zipper Block Machine.
1 — Used 21 Cu. Ft. batch mixer with 10 HP Motor.
4,000 — Used 8" and 12" steel pallets. Also used 4,000# Fork Lift Truck.

Contact: JIM MOLINARI
MOLINARI'S INC.
Rt. 20 Shrewsbury, Mass.
Phone: Viking 4-4421

## FOR SALE

Stearns #50
**Priced for quick sale. This machine completely overhauled and in excellent condition.**

LINVILLE'S INC.
P. O. Box 226 Wilson, N. C.

## FOR SALE

Several pressure cylinders, seven feet in diameter by 132 feet long, good for working pressures to 200 pounds. Includes 30-inch gage dolly tracks and steam coils. Bolted doors both ends.

Address: Box A-25, care CONCRETE
400 W. Madison St., Chicago 6, Ill.

## FOR SALE

94 — Like new — channel roof slab forms. 3½" channel depth x 1" web thickness. Width 2' x 8' x 4" long. All steel — complete with dividers, spacers, lifters and wire mesh table.

SIMMS PRECAST CORP.
Route 4, Box 68 Salem, Virginia

## FOR SALE

Used conveyor belting, 4 to 8 ply, any length, 28 ounce duct, 18", 24", 30", 36", 48". Used portable belt conveyors, 50 to 60 ft., electric motors 24" wide, $1,000. and up.

G. P. REICHEL
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Phone: Lincoln 9-8459

## FOR SALE

**Established cement mixing and sand drying business for sale. Trackage location in Omaha, Nebraska.**

**Address: Box A-27, care CONCRETE 400 W. Madison St., Chicago 6, Illinois**

## FOR SALE

**Multiplex plain pallet block machine, complete with all attachments, off-bearer, power unit. Priced very reasonably. Can be seen at our plant.**

THE KENT MACHINE COMPANY
113 E. Portage Trail, Cuyahoga Falls, Ohio

**Concrete Block Machine**
**Factory Reconditioned**

FMC—180, plain pallet block machine, guaranteed. Comes complete with motors and mold box. Capacity 1400 blocks daily. Financing available.

FLEMING MANUFACTURING CO.
Cuba, Missouri

## FOR SALE

Semi-Automatic Kent Blockmaker, vibrator type, 4" & 8" mold boxes, one pallet oiler, Barrett hand lift truck, 2480 pallets. Excellent condition. F. O. B. Medina. Priced for quick sale.

CITY BLOCK & SUPPLY CO.
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## INVENTORS AND MACHINE DESIGNERS

National manufacturer is desirous of obtaining manufacturing and sales rights on any equipment or improvements used in concrete products plants on a royalty or outright purchase basis. Patents not essential. Protection guaranteed.

**Address: Box E-4, care CONCRETE**
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## PALLET CLEANING

We have the most modern machines in use and can do your pallet cleaning to meet your work schedule. There is no extra charge for transporting our machines as they move on our own trucks.

EASTERN PALLET CLEANING, INC.
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Phone: Union 9-0260

## FOR SALE

**One FMC 180 plant complete and operating. Consisting of:**

**180 — 4", 8", and 12" mold boxes**
**12 cubic foot mixer**
**8" belt conveyor**
**27 steel racks**
**700 wooden pallets.**
**The entire plant for $2,750.00**

BURL A. MUNSELL
Star Route, Dillard, Mo.
Phone via Fenton: Riverview 3-2152

## FOR SALE

**Stearns Zipper Vibrator block machine with 4" and 8" attachments; pressed steel pallets for both sizes; (2) 12 cu. ft. mixers; (1) 18 cu. ft. skip loader; 32 steel racks. Condition especially good. Attractively priced.**

**Installing higher production GoCorp Trustee is the reason for disposing of the above.**

U.S. CONCRETE PRODUCTS COMPANY
Upper Sandusky, Ohio.
Phone: 342

## SWAP — SELL — BUY
## BLOCK MACHINES

| | |
|---|---|
| Stearns #7 & 9 Joltcretes | $ 500.00 each |
| (Joltcrete owners at this price buy one for spare parts.) | |
| Mold Boxes #7 & 9 | 150.00 each |
| Truckman Platform Lift 4000 lbs. capacity | 495.00 |
| 1—Y-40 Truckman Fork-Lift 4000 lb. Capacity. 1956 Model | 3500.00 |
| 2—Air Offbearers Stearns #7 & 9 | 250.00 each |
| 2—Hand Lift Trucks | 175.00 each |
| 1—Lith-I-Bar 2 Block Machine complete with 1000 plain steel pallets 18" x 22" | $4900.00 |
| 100—Racks and cored steel pallets | 10.00 each |
| 100,000 pressed steel pallets in stock | |

(Send tracing or sample for quotation).

WRITE • WIRE • PHONE
Mr. McCaughey

Send in list of equipment you need. If we don't have it in stock, we usually know where we can find it at a bargain.

**GENERAL ENGINES CO., INC.**
**Route 130 Thorofare, N. J.**
**Phone: Tilden 5-5400**

## WORLDS BEST
## Stripping Splash
## Block Molds 2½"x11½"x36"

**F. H. A. Approved Mold Made out of deep drawn 16 gauge steel $16.00 each in lots of 10 or more $12.95 F.O.B.**

**Send for Free Bulletin on many other High Profit Low Cost Molds.**

**PARK MOLD & STEP CO.**
**1020 N. Raymond Rd. Battle Creek, Mich.**

# SMITHKO COLORS CEMENT

- **The Standard of Comparison for Nearly Forty Years**
- **65 Shades to Choose From Including Many New Colors**

**Send For Latest COLOR CARD, Samples, Technical Brochure, and Quotations.**

**SMITH CHEMICAL & COLOR CO.**
**53-57 John St., Brooklyn 1, N.Y.**

**SITUATION WANTED**

Competent block plant manager with good record and best references desires change. Available January first.

Address: Box A-26, Care CONCRETE
400 West Madison St., Chicago 6, Ill.

**SITUATION WANTED**

Am under 40 years of age, married, have good education, sober habits. Thoroughly experienced in all phases of concrete products business. Have successfully held technical, service, sales and advertising positions within the concrete products industry. Have no capital. Will match my know-how with responsible party's capital to start, manage or expand concrete products business anywhere in the world.

Address: Box A-24, care CONCRETE
400 West Madison St., Chicago 6, Ill.

**FOR SALE**

Cored steel pallets.

Plain steel pallets.

All sizes — New.

**BLEIM STEEL COMPANY**

3301 South Avenue Toledo 9, Ohio
Phone: Walbridge 3496

**E. L. CONWELL & CO.**

Established 1894

ENGINEERS • CHEMISTS

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Cement, Chemical and Physical Laboratories
Tests of Cement, Concrete, Sand, Steel, Cement Block, Cement Brick.
Chemical Analyses of All Commercial Products. Complete Technical Supervision of Central Mixed Concrete Plants.

2024 ARCH ST. • PHILADELPHIA, PA.

**DRAIN TILE TEES**

Strip out completed tees from your concrete drain tile machine with this special casing. Up to 80 per hour.
For information write:

CONCRETE SPECIALTIES COMPANY
5500 Richfield Rd., Flint, Mich.

**PLAIN PALLET CLEANING**

We truck our machine to your plant and supervise entire cleaning and planing off of pallet residue. No need to shut down as we will keep up with production.

EDWARD A. LOBSTEIN
5363 Seminole Ave. Detroit 13, Mich.
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**FOR SALE**

One Truckman platform truck, with power lift. In very good working condition . . . $650.00. Two Truckman platform trucks with manual lifts. One Erickson F5 power lift truck, 5,000#. Motor completely overhauled. Excellent rubber. Will guarantee. Priced to sell.

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Stearns 12' mixer and skiploader w/ all motors
Stearns 28' skiploader
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Stearns 18' mixer and motor
Joltcrete boxes and pallets
Stearns zipper W/8" attachments

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2530 N. Broad St. Philadelphia 32, Pa.
Phone: Sa 2-3800
Representing: THE GENE OLSEN CORP.
Adrian, Michigan.

**FOR SALE**

1954 International Series R 185 truck with 4 cube Rehberger Roll-Off body. Good condition. $5,000.00 complete.

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P. O. Box 2 Poquonnock Bridge, Conn.

**COLORS** *For Cement and Concrete*

COLOR YOUR CONCRETE WITH LANSCO CEMENT COLORS, available in 40 ATTRACTIVE shades. Suitable for all types of concrete products. Write for our new color card, copy of "Suggestions For Using Cement Colors," and for free samples and price list.

*Manufactured by:*

**LANDERS-SEGAL COLOR CO.**
76 Delevan St. • Brooklyn 31, N. Y.

LOOKING FOR A GOOD DEAL IN A

**USED BLOCK MACHINE?**

**SPECIAL SALE**

BESSER

**SUPER VIBRAPAC**

Used, but completely rebuilt with new height and density control. Machine is in first class condition, ready to make blocks. Looks and runs like new . . . priced far below the regular market. $15,650
F.O.B. Vancouver, Wash.

**ALSO** LADWIG MOD. 4 GIB HOIST offbearer and a selection of modular molds also available.

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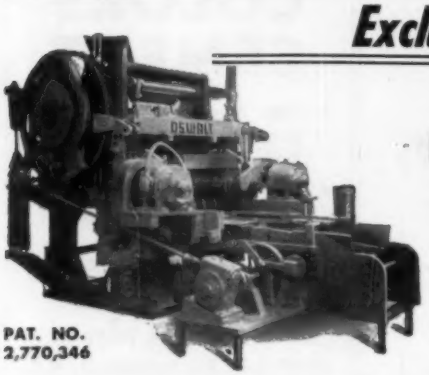
**COLUMBIA MACHINE**
107 S. GRAND VANCOUVER, WASH.
Phone OXford 4-1501

***Exclusive Features* insure Record Block Profits**

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**The OSWALT Block Machine *controls* the Quality**

OSWALT Simplified Height and Density Control insure uniform size, texture, compactness of block.

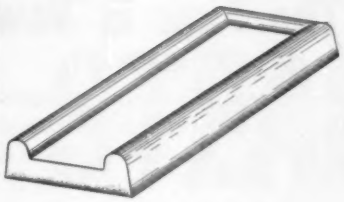
OSWALT Improved Vibration at higher speed-rate boosts production without sacrifice of quality.

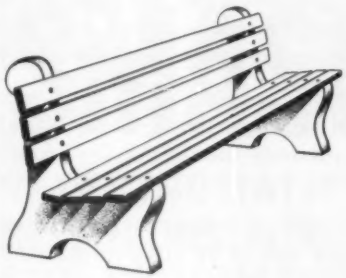
OSWALT Front-End Pallet Feeder and Panel Control System maintain smooth, gentle block ejection—more perfect blocks per hour.

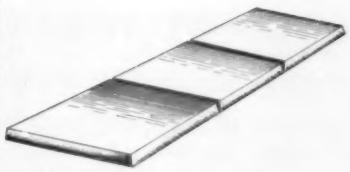
*Send for our new Brochure*

**OSWALT ENGINEERING SERVICE CORP.**
1335 Circle Ave., Forest Park, Ill.
Phones: EStebrook 8-4664 (Chicago), FOrest 6-2798 (Suburban)

*Always Use*
**SPILLMAN'S CONCRETE FORMS!**







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- SPLASH BLOCKS
- PARK BENCHES
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- BIKE BLOX
- STEP TREADS
- CHIMNEY CAPS
- POOL COPING
- LAWN TRIM
- PICNIC TABLES

**SWISS FORM OIL**

**VIBRO-TABLES**

FOR DETAILS WRITE TO:
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Box 534, Station "G" Columbus, Ohio

**No Matter What SIZE...** **No Matter What SHAPE...**

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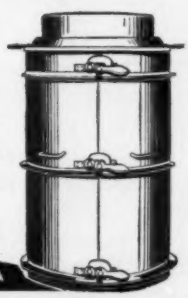
***Set The STANDARD For Producing Quality Pipe!***

Over 50 years of experience go into the production of every Quinn Concrete Pipe Form. That's why the Quinn Heavy Duty form is recognized as the STANDARD the world over for producing quality concrete pipe at the lowest cost. Used in making pipe by vibration, spading, or tamping. Sizes for pipe 10" to 120" and larger. Tongue and groove (as shown) or bell end pipe in any length desired. No matter what size, shape, or length pipe you need, there's a Quinn pipe form made to fit your requirements. Write today for our FREE catalog and estimates.



*Also Manufacturers of QUINN CONCRETE PIPE MACHINES*

Quinn WIRE & IRON WORKS BOONE, IOWA

**CONCRETE BURIAL VAULTS**

AMERICA'S FINEST MOLDS AND LOWERING DEVICES

SOLD BY FUNERAL DIRECTORS NATIONALLY
YOUR AREA MAY STILL BE AVAILABLE
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# THE EDITOR'S PAGE

DOUGLAS LEE

## The Time Is Now

FROM 1946 through part of 1956, demand for block increased pretty generally each year. During this most lush of all periods in the history of the block business, the block producer, oldtimer or newcomer, could prosper almost in spite of himself. Throughout this period industry leaders frequently pointed to the day when the industry would again have to get out and sell its product and wondered what many individual producers would do when faced with this prospect.

It is generally conceded that the day of easy money is past. Sales are down this year rather generally throughout the country, seriously down in some areas.

If nothing else, this slackening off of business suggests a new approach is needed—a new objective look at all areas of marketing your block should be made.

A valid criticism of the average block producer's merchandising approach was voiced by NCMA President Philip Paolella at the Southeastern Concrete Masonry Association meeting in November.

Taking a usual figure of two per cent of gross sales spent on advertising and promoting an industry's product, Mr. Paolella figured the block industry, with its approximately $400,000,000 annual volume, should be spending roughly $8,000,000 to promote its product. Broken down, this comes to approximately $4,000 per million units produced. Mr. Paolella's guess for the producers in his own state, Connecticut, was that they were spending, on the average, less than half this amount.

Nationally, promotion of block is fairly comprehensive, though still more could be done if the funds were available. The wealth of material beamed at the architect, engineer, builder, contractor, and buying public is considerable. For instance, block, in its various forms and varieties, including the materials that go into it or are used with it, have a spread of at least 128 pages in *Sweet's Architectural File.* Additionally, several hundred thousand dollars are spent annually by various organizations to promote the use of concrete block through the architectural and shelter magazines. To this annual volume of paid advertising are added countless pages of editorial material featuring concrete block construction.

And yet, with all this awareness built up in those who buy, specify, or own, we suspect little is done by many local producers to effect a tie in. The evidence of local promotion we see cross our desk, and we get a good cross section of it, would indicate that the job done by individual producers over the country is woefully inadequate.

Certainly, just sitting back and licking the wounds stemming from a drop in sales and income won't bring the market back. We suggest, instead, a more vigorous merchandising approach on all fronts.

December 1957

# CONCRETE BLOCK NEWS

Adrian, Michigan

5 ★★★★★ Final

# STEARNS MACHINE SMASHES RECORDS

## "ELECTROMATIC" SETS NEW HIGHS FOR QUALITY AND PRODUCTION COAST TO COAST!

ADRIAN, MICH., Dec. 1. Reports of record smashing quantity and quality concrete block are being received here daily, from enthusiastic Electromatic buyers throughout the entire nation. Owners, using all types of aggregates are producing 1,000 to 1,100 (8"x8"x16" or equivalent) units per hour of top quality block. Proved performance and widely accepted by leaders of the concrete block-making industry, the Electromatic's built-in quality assures dependable performance at lower maintenance—unparalleled production for lower unit cost, and increased profits. Write today for full particulars and the installation nearest you.

### HUMPHRIES SAYS EXTRA BLOCKS MEAN EXTRA PROFITS!

DORAVILLE, GA., Nov. 19. "We wish to thank Stearns for selling us this machine," stated E. N. Humphries, President and owner of Humphries Concrete Block Co., Doraville, Ga. This profound statement was forthcoming from Mr. Humphries after months of intensive trouble-free operation of their Stearns Electromatic block machine. Averaging 7,488 quality blocks (8"x8"x16") in a 7½ hour work day, prompted Mr. Humphries to add, "To us, it is no doubt, the finest piece of equipment we have operated." Proof positive—that EXTRA BLOCKS—MEAN EXTRA PROFITS with the Electromatic!

### CREGO MAINTAINS OVER 1000 BLOCK PER HOUR

ALBUQUERQUE, N. M., Sept. 19. Amazing production of over 1,000 quality blocks per hour on his new Stearns Electromatic has been reported here by Mr. "Ben" B. Crego, owner, Crego Block Co. "We have maintained a six cycle per minute production using our Red Scotia aggregate over the entire six months period of operation," says Mr. Crego, "and we couldn't be happier than with our Electromatic."

### KISSAM QUALITY BLOCK WINS NEW CUSTOMERS

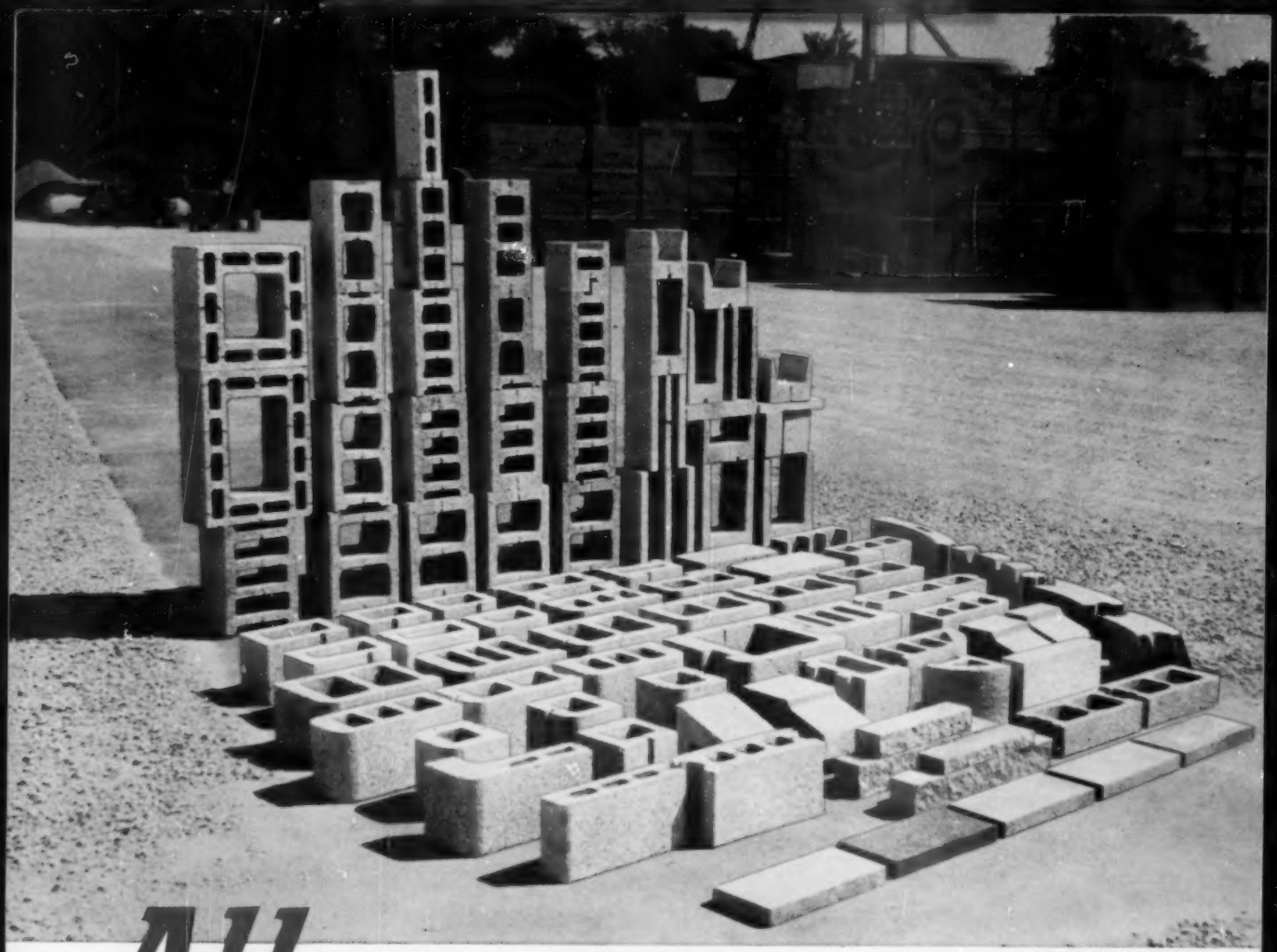
ORLANDO, FLA., Jan. 23. "Reaction of local architects, contractors, builders and masons has been so favorable about the quality of blocks produced by our new Stearns Electromatic," says Mr. K. F. Hill, President of Kissam Builders Supply Co. of Orlando, "that we have actually gained new customers for Kissam blocks." Understandably, they are very pleased with the Electromatic—its high production of quality block—its ability to insure increased profit. So much so—that they are installing two more.

### WILLSON BROS. BLOCK SALES UP 25%

RIVES JUNCTION, MICH., July 26. A concrete block sales increase of 25% since installing their new Stearns Electromatic has been reported by Bob Willson, President of Willson Bros. Michigan building supply dealer. "Three factors of Electromatic operation," says Mr. Willson, "have combined to my complete satisfaction." They are, perfect machine operation, 1,080 (8"x8"x16") units per hour, block of excellent quality.

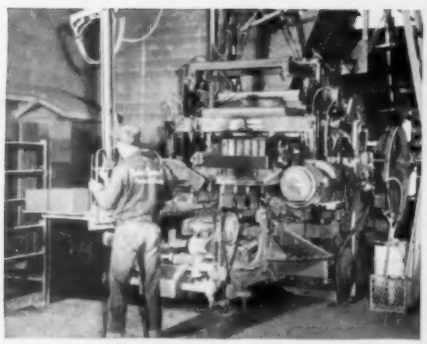
### COLUMBIA INSTALLS THREE ELECTROMATICS

TUCSON, ARIZ., April 3. "So pleased am I, with Stearns Electromatic block machine," writes Mr. Carl Shurtz, President of Columbia Block Co. Inc., "that I am attaching my order with deposit for two more." In addition, Mr. Shurtz reports maintenance and repair costs total $1.87.

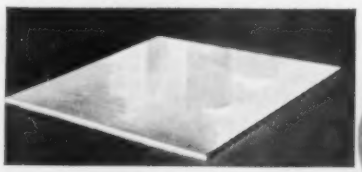


# All made on the VIBRAPAC

Yes — every unit shown in the above illustration . . . in fact, many more units not shown . . . are made on a standard Besser Vibrapac. The versatility of the Vibrapac makes it possible for the blockmaker to supply ALL units used in building a complete concrete masonry structure. Besser originated the Plain Pallet Stripper principle and only ONE set of Plain Pallets is required for ALL sizes of units . . . a tremendous time-saving, cost-reducing feature. Now we also have patio block, split-block and the new Shadowal Block. Write today for literature.



Dependable and versatile Vibrapac machine, fully automatic including front feeding of pallets. Off-bearer removes green block with the help of a Besser Power Hoist, at the same time returning empty pallets to the machine.



The Plain Pallet Stripper principle . . . originated by Besser . . . paved the way for quick easy changes to modular dimension block and the great variety of new units used today.

**BESSER Company**

Dept. 127, Alpena, Mich., U.S.A.

FIRST IN CONCRETE BLOCK MACHINES

A7-155